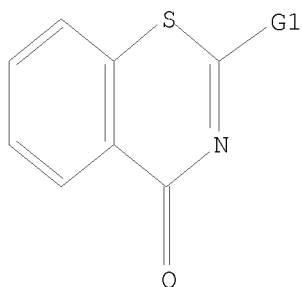


=> d l1
L1 HAS NO ANSWERS
L1 STR



G1 Cb,Ak

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SEARCH INITIATED 09:10:52 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 498 TO ITERATE

100.0% PROCESSED 498 ITERATIONS 14 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 8622 TO 11298
PROJECTED ANSWERS: 56 TO 504

L2 14 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 09:11:01 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 10083 TO ITERATE

100.0% PROCESSED 10083 ITERATIONS 219 ANSWERS
SEARCH TIME: 00.00.01

L3 219 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 178.36 178.57

FILE 'CAPLUS' ENTERED AT 09:11:08 ON 13 FEB 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE LAST UPDATED: 12 Feb 2008 (20080212/ED)

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<http://www.cas.org/infopolicy.html>

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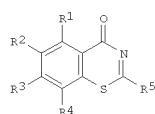
L4 45 L3

=> d ibib abs hitstr tot

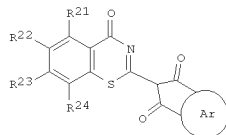
L4 ANSWER 1 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:33207 CAPLUS
 DOCUMENT NUMBER: 146:131801
 TITLE: Optical recording medium and benzo-[e]-[1,3]-thiadiazin-4-one derivative
 INVENTOR(S): Ishida, Tsutomu; Miyazato, Masataka; Shiozaki, Hiroyuki; Ogiso, Akira
 PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 51pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007001094	A	20070111	JP 2005-182695	20050622
PRIORITY APPLN. INFO.:			JP 2005-182695	20050622

OTHER SOURCE(S): MARPAT 146:131801
 GI



I

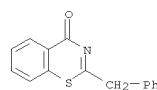


II

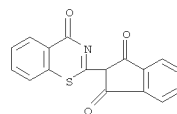
AB The material contains ≥ 1 benzo-[e]-[1,3]-thiadiazin-4-one derivative in ≥ 0.1 of the recording layer. The compound I and II (one of the tautomeric structure) (R1-5, R21-24 = H, halo, nitro, cyano, OH, carbonyl alkyl, aralkyl, aryl, metallocenyl, etc.; Ar = aromatic ring) are claimed.

IT The material is recorded and read by 300-900 nm laser beam.
 67433-04-9 918647-38-8 918647-40-2
 918647-42-4 918647-45-7 918647-47-9
 918647-49-1 918647-51-5 918647-53-7
 RL: TEM (Technical or engineered material use); USES (Uses)
 (optical recording material containing benzothiazinone compound)
 RN 67433-04-9 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-(phenylmethyl)- (CA INDEX NAME)

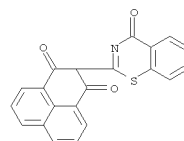
L4 ANSWER 1 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 918647-38-8 CAPLUS
 CN 1H-Indene-1,3(2H)-dione, 2-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)

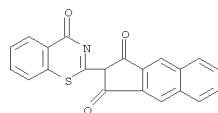


RN 918647-40-2 CAPLUS
 CN 1H-Phenylene-1,3(2H)-dione, 2-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)

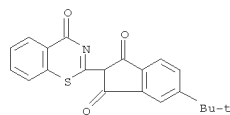


RN 918647-42-4 CAPLUS
 CN 1H-Benz[f]indene-1,3(2H)-dione, 2-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)

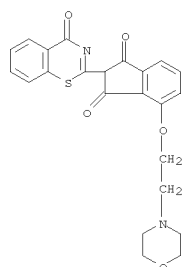
L4 ANSWER 1 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 918647-45-7 CAPLUS
 CN 1H-Indene-1,3(2H)-dione, 5-(1,1-dimethylethyl)-2-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)

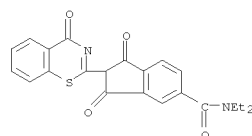


RN 918647-47-9 CAPLUS
 CN 1H-Indene-1,3(2H)-dione, 4-[2-(4-morpholinyl)ethoxy]-2-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)

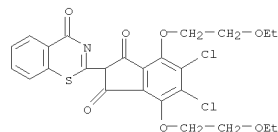


RN 918647-49-1 CAPLUS
 CN 1H-Indene-5-carboxamide, N,N-diethyl-2,3-dihydro-1,3-dioxo-2-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)

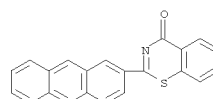
L4 ANSWER 1 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



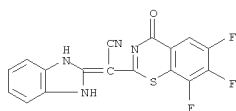
RN 918647-51-5 CAPLUS
 CN 1H-Indene-1,3(2H)-dione, 5,6-dichloro-4,7-bis(2-ethoxyethoxy)-2-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)



RN 918647-53-7 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-(2-anthracenyl)- (CA INDEX NAME)

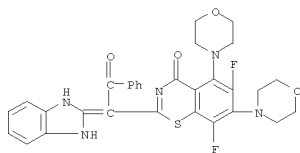


L4 ANSWER 2 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2005:1010008 CAPLUS
 DOCUMENT NUMBER: 144:390853
 TITLE: Polyfluorobenzoyl chlorides and isothiocyanates in reactions with CH-reactive benzimidazoles
 AUTHOR(S): Nosova, E. V.; Lipunova, G. N.; Laeva, A. A.; Charushin, V. N.
 CORPORATE SOURCE: Ural State Technical University, Yekaterinburg, 620002, Russia
 SOURCE: Russian Chemical Bulletin (2005), 54(3), 733-737
 CODEN: RCBUEY; ISSN: 1066-5285
 PUBLISHER: Springer Science+Business Media, Inc.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 144:390853
 AB Reactions of 2-(benzoylmethyl)benzimidazole with tetra- and pentafluorobenzoyl chlorides afford fluorine-containing 6-benzoyl-7H-benzimidazo[3,2-a]quinolones. 2-(Cyanomethyl)- or 2-(benzoylmethyl)benzimidazole reacts with tetra(penta)fluorobenzoyl isothiocyanates to give fluorine-containing 1,3-benzothiazinones, which differently behave in reactions with cycloalkylimines.
 IT 883241-79-0P 883241-80-3P 883241-81-4P
 883241-82-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of fluorinated benzimidazoquinolones and benzothiazinones by cyclocondensation of CH-reactive benzimidazoles with fluorobenzoyl chlorides or isothiocyanates)
 RN 883241-79-0 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, α -(1,3-dihydro-2H-benzimidazol-2-ylidene)-6,7,8-trifluoro-4-oxo- (CA INDEX NAME)

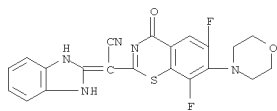


RN 883241-80-3 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, α -(1,3-dihydro-2H-benzimidazol-2-ylidene)-5,6,7,8-tetrafluoro-4-oxo- (CA INDEX NAME)

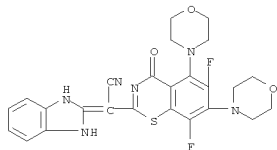
L4 ANSWER 2 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 883241-87-0 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, α -(1,3-dihydro-2H-benzimidazol-2-ylidene)-6,8-difluoro-7-(4-morpholinyl)-4-oxo- (CA INDEX NAME)

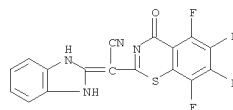


RN 883241-89-2 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, α -(1,3-dihydro-2H-benzimidazol-2-ylidene)-6,8-difluoro-5,7-di-4-morpholinyl-4-oxo- (CA INDEX NAME)

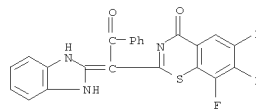


REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE
 FORMAT

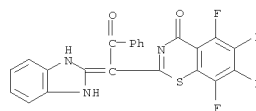
L4 ANSWER 2 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 883241-81-4 CAPLUS
 CN 4H-1,3-Benzothiazine-2-one, 2-[1-(1,3-dihydro-2H-benzimidazol-2-ylidene)-2-oxo-2-phenylethyl]-6,7,8-trifluoro- (CA INDEX NAME)



RN 883241-82-5 CAPLUS
 CN 4H-1,3-Benzothiazine-2-one, 2-[1-(1,3-dihydro-2H-benzimidazol-2-ylidene)-2-oxo-2-phenylethyl]-5,6,7,8-tetrafluoro- (CA INDEX NAME)

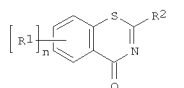


IT 883241-85-8P 883241-87-0P 883241-89-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of fluorinated benzimidazoquinolones and benzothiazinones by cyclocondensation of CH-reactive benzimidazoles with fluorobenzoyl chlorides or isothiocyanates)
 RN 883241-85-8 CAPLUS
 CN 4H-1,3-Benzothiazine-2-one, 2-[1-(1,3-dihydro-2H-benzimidazol-2-ylidene)-2-oxo-2-phenylethyl]-6,8-difluoro-5,7-di-4-morpholinyl- (CA INDEX NAME)

L4 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2004:568612 CAPLUS
 DOCUMENT NUMBER: 141:123638
 TITLE: Preparation of 1,3-benzothiazinones as macrophage migration inhibitory factor binders and apoptosis inhibitors, and treatment of diseases with them or their prodrugs
 INVENTOR(S): Kajino, Masahiro; Nakayama, Yutaka; Kimura, Atsuhide
 PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 55 pp.
 CODEN: JKXKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
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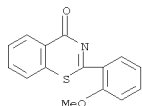
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004196792	A	20040715	JP 2003-406172	20031204
WO 2004060881	A1	20040722	WO 2003-JP15535	20031204
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SV, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003289176	A1	20040729	AU 2003-289176	20031204
EP 1568697	A1	20050831	EP 2003-777247	20031204
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2006052371	A1	20060309	US 2005-537520	20050901
PRIORITY APPLN. INFO.: JP 2002-353546 A 20021205				
WO 2003-JP15535 W 20031204				

OTHER SOURCE(S): MARPAT 141:123638
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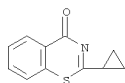


AB Title compds. I [R1 = halo, OH, NO2, (halo)alkyl, acyl, (un)substituted amino; R2 = (un)substituted branched alkyl, (un)substituted cycloalkyl, (un)substituted condensed homocyclic ring residue, substituted Ph; n = 0-4] or their salts, which have low toxicity (no data), are prepared The

L4 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 compds. or their prodrugs are useful for prophylactic and therapeutic
 treatment of circulation disorders (e.g. heart failure), bone and joint
 diseases, infectious diseases, inflammation, and kidney diseases. Thus,
 2-[(cyclopropylcarbonyl)thio]benzoic acid was treated with ClCO₂Et, NaN₃,
 and Bu₃P, and cyclized to give I (R_{1n} = H, R₂ = cyclopropyl), which
 inhibited rat myocardial apoptosis with IC₅₀ value of 0.072 μM.
 IT 543696-69-1P 722507-22-4P 722507-32-6P
 722507-34-8P 722507-36-0P 722507-38-2P
 722507-40-6P 722507-42-8P 722507-44-0P
 722507-46-2P 722507-48-4P 722507-50-8P
 722507-52-0P 722507-54-2P 722507-56-4P
 722507-58-6P 722507-60-0P 722507-62-2P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)
 (preparation of benzothiazinones as macrophage migration inhibitory
 factor binders and apoptosis inhibitors for treatment of diseases)
 RN 543696-69-1 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-(2-methoxyphenyl)- (CA INDEX NAME)

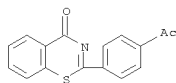


RN 722507-22-4 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-cyclopropyl- (CA INDEX NAME)

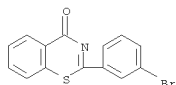


RN 722507-32-6 CAPLUS
 CN Acetic acid, [3-(4-oxo-4H-1,3-benzothiazin-2-yl)phenoxy]-,
 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

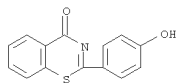
L4 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



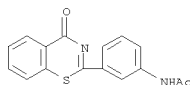
RN 722507-42-8 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-(3-bromophenyl)- (CA INDEX NAME)



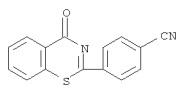
RN 722507-44-0 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-(4-hydroxyphenyl)- (CA INDEX NAME)



RN 722507-46-2 CAPLUS
 CN Acetamide, N-[3-(4-oxo-4H-1,3-benzothiazin-2-yl)phenyl]- (CA INDEX NAME)

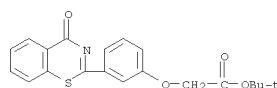


RN 722507-48-4 CAPLUS
 CN Benzonitrile, 4-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)

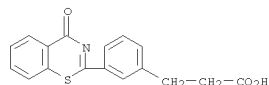


RN 722507-50-8 CAPLUS

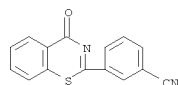
L4 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



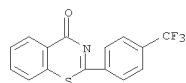
RN 722507-34-8 CAPLUS
 CN Benzenepropanoic acid, 3-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)



RN 722507-36-0 CAPLUS
 CN Benzonitrile, 3-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)

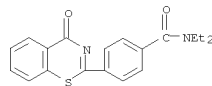


RN 722507-38-2 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-[4-(trifluoromethyl)phenyl]- (CA INDEX NAME)

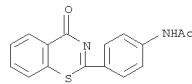


RN 722507-40-6 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-(4-acetylphenyl)- (CA INDEX NAME)

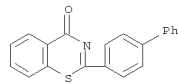
L4 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 CN Benzanide, N,N-diethyl-4-(4-oxo-4H-1,3-benzothiazin-2-yl)- (CA INDEX NAME)



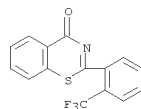
RN 722507-52-0 CAPLUS
 CN Acetamide, N-[4-(4-oxo-4H-1,3-benzothiazin-2-yl)phenyl]- (CA INDEX NAME)



RN 722507-54-2 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-[1,1'-biphenyl]-4-yl- (CA INDEX NAME)

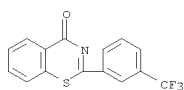


RN 722507-56-4 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-[2-(trifluoromethyl)phenyl]- (CA INDEX NAME)

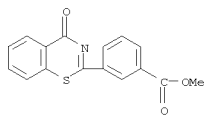


RN 722507-58-6 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

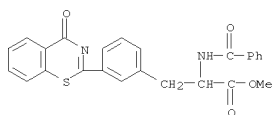
L4 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 722507-60-0 CAPLUS
 CN Benzoic acid, 3-(4-oxo-4H-1,3-benzothiazin-2-yl)-, methyl ester (CA INDEX NAME)



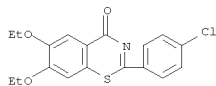
RN 722507-62-2 CAPLUS
 CN Phenylalanine, N-benzoyl-3-(4-oxo-4H-1,3-benzothiazin-2-yl)-, methyl ester (CA INDEX NAME)



IT 722507-66-6P 722507-84-8P 722507-88-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of benzothiazinones as macrophage migration inhibitory factor binders and apoptosis inhibitors for treatment of diseases)
 RN 722507-66-6 CAPLUS
 CN Benzenepropanoic acid, 3-(4-oxo-4H-1,3-benzothiazin-2-yl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

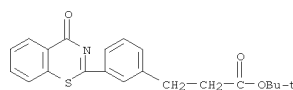
L4 ANSWER 4 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:805367 CAPLUS
 DOCUMENT NUMBER: 138:221554
 TITLE: Synthesis and structural characterization of 4H-1,3-benzothiazine derivatives
 AUTHOR(S): Fodor, Lajos; Bernath, Gabor; Sinkkonen, Jari; Pihlaja, Kalevi
 CORPORATE SOURCE: Research Group for Heterocyclic Chemistry of the Hungarian Academy of Sciences, Institute of Pharmaceutical Chemistry, University of Szeged, Szeged, H-6701, Hung.
 SOURCE: Journal of Heterocyclic Chemistry (2002), 39(5), 927-931
 CODEN: JHTCAD; ISSN: 0022-152X
 PUBLISHER: HeteroCorporation
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 138:221554
 AB The ring-closure reactions of N-arylthiomethylaroylamide derivs. [e.g., 4-methoxy-N-[(3-methylphenyl)thio]methyl]benzamide, 4-chloro-N-[(3,4-diethoxyphenyl)thio]methyl]benzamide, etc.] in the presence of phosphorus oxychloride gave 2-aryl-4H-1,3-benzothiazines. 2-(3-Chlorophenyl)-6-methyl-4H-1,3-benzothiazine was reduced with Zn to obtain the corresponding 2,3-dihydro derivative Potassium permanganate oxidation of 2-(4-chlorophenyl)-2,3-diethoxy-4H- and 2-(2-fluorophenyl)-6,7-diethoxy-4H-1,3-benzothiazines gave the corresponding 4-ones. The reactions of 2-(4-chlorophenyl)-6-methyl-4H-1,3-benzothiazine with substituted acetyl chlorides led to linearly condensed β -lactams. The structures of the compds. studied were confirmed by ¹H and ¹³C NMR and by their characteristic mass spectrometric fragmentations. Azeto[2,1-b][1,3]benzothiazin-1-one derivs. were also prepared
 IT 501087-96-3P 501087-97-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and structural characterization of (phenyl)benzothiazine derivs.)
 RN 501087-96-3 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-(4-chlorophenyl)-6,7-diethoxy- (CA INDEX NAME)

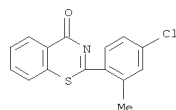


RN 501087-97-4 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 6,7-diethoxy-2-(2-fluorophenyl)- (CA INDEX NAME)

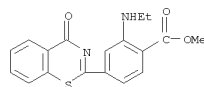
L4 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



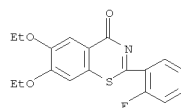
RN 722507-84-8 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-(4-chloro-2-methylphenyl)- (CA INDEX NAME)



RN 722507-88-2 CAPLUS
 CN Benzoic acid, 2-(ethylamino)-4-(4-oxo-4H-1,3-benzothiazin-2-yl)-, methyl ester (CA INDEX NAME)



L4 ANSWER 4 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



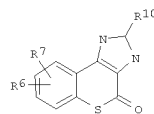
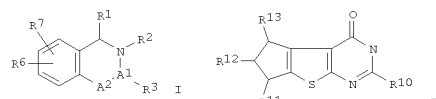
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
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L4 ANSWER 5 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2002:428886 CAPLUS
 DOCUMENT NUMBER: 137:28319
 TITLE: Heterocyclic poly(ADP-ribose) polymerase (PARP) inhibitors
 INVENTOR(S): Melese, Teri; Perkins, Edward L.; Yeh, Elaine; Sun, Donxu
 PATENT ASSIGNEE(S): Iconix Pharmaceuticals, Inc., USA
 SOURCE: PCT Int. Appl., 37 pp.
 CODEN: FIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002044157	A2	20020606	WO 2001-US46811	20011203
WO 2002044157	A3	20021227		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2002020241	A5	20020611	AU 2002-20241	20011203
PRIORITY APPLN. INFO.:			US 2000-250811P	P 20001201
			WO 2001-US46811	W 20011203

OTHER SOURCE(S): MARPAT 137:28319
 GI

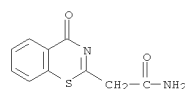
L4 ANSWER 5 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



AB Comps. I, II, and III [A1 = C(R4), N; A2 = C(R5), S; R1 = H, lower alkyl, halo, carbonyl; R2 = H, lower alkyl, acyl, or forms double bond with adjacent ring atom; R3 = H, lower alkyl, halo, aryl, etc.; R4 = H, lower alkyl, or forms double bond with adjacent ring atom; R5 = H, lower alkyl, OH, halo, lower alkoxy, etc.; R6, R7 = H, lower alkyl, OH, lower alkoxy, halo, nitro, etc.; R10 = H, lower alkyl, lower alkenyl, aryl, heterocyclyl, etc.; R11-R13 = halo, nitro, OH, NH2, lower alkyl], and pharmaceutically acceptable salts thereof, are effective modulators of PARP enzymes.

IT 67433-05-0, ICX 56259537
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (Heterocyclic poly(ADP-ribose) polymerase (PARP) inhibitors)

RN 67433-05-0 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetamide, 4-oxo- (CA INDEX NAME)

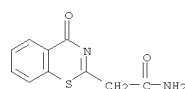


L4 ANSWER 6 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2001:401958 CAPLUS
 DOCUMENT NUMBER: 135:220880
 TITLE: Novel inhibitors of poly(ADP-ribose) polymerase/PARP1 and PARP2 identified using a cell-based screen in yeast
 AUTHOR(S): Perkins, Ed; Sun, Dongxu; Nguyen, Allen; Tulac, Suzana; Francesco, Michelle; Tavana, Homa; Nguyen, Hieu; Tugendreich, Stuart; Barthmaier, Peter; Couto, Joe; Yeh, Elaine; Thode, Silke; Jarnagin, Kurt; Jain, Ajay; Morgans, David; Melese, Teri
 CORPORATE SOURCE: Iconix Pharmaceuticals, Mountain View, CA, 94043, USA
 SOURCE: Cancer Research (2001), 61(10), 4175-4183
 CODEN: CNREA8; ISSN: 0008-5472
 PUBLISHER: American Association for Cancer Research
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Multicellular organisms must have means of preserving their genomic integrity or face catastrophic consequences such as uncontrolled cell proliferation or massive cell death. One response is a modification of nuclear proteins by the addition and removal of polymers of ADP-ribose that modulate the properties of DNA-binding proteins involved in DNA repair and metabolism. These ADP-ribose units are added by poly(ADP-ribose) polymerase (PARP) and removed by poly(ADP-ribose) glycohydrolase. Although budding yeast *Saccharomyces cerevisiae* does not possess proteins with significant sequence similarity to the human PARP family of proteins, we identified novel small mol. inhibitors against two family members, PARP1 and PARP2, using a cell-based assay in yeast. The assay was based on the reversal of growth inhibition caused by the heterologous expression of either PARP1 or PARP2. Validation of the assay was achieved by showing that the growth inhibition was relieved by a mutation in a single residue in the catalytic site of PARP1 or PARP2 or exposure of yeast to a known PARP1 inhibitor, 6(5H)-phenanthridinone. In sep. expts., when a putative protein regulator of PARP activity, human poly(ADP-ribose) glycohydrolase, was coexpressed with PARP1 or PARP2, yeast growth was restored. Finally, the inhibitors identified by screening the yeast assay are active in a mammalian PARP biochem. assay and inhibit PARP1 and PARP2 activity in yeast cell exts. Thus, our data reflect the strength of using yeast to identify small mol. inhibitors of therapeutically relevant gene families, including those that are not found in yeast, such as PARP. The resultant inhibitors have two critical uses (a) as leads for drug development and (b) as tools to dissect cellular function.

IT 67433-05-0
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 (novel inhibitors of poly(ADP-ribose) polymerase/PARP1 and PARP2 identified using a cell-based screen in yeast)

RN 67433-05-0 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetamide, 4-oxo- (CA INDEX NAME)

L4 ANSWER 6 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



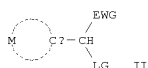
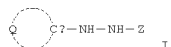
REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L4 ANSWER 7 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:822981 CAPLUS
DOCUMENT NUMBER: 133:367807
TITLE: Silver halide color photographic material containing color developer and coupler and image formation
INVENTOR(S): Uchida, Osamu; Ishiwata, Yasuhiro; Katsumata, Taiji
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 46 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000321733	A	20001124	JP 1999-127300	19990507
PRIORITY APPLN. INFO.:			JP 1999-127300	19990507

OTHER SOURCE(S): MARPAT 133:367807
GI



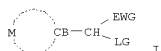
AB The material comprises a support having thereon ≥ 1 hydrophilic colloid layer containing ≥ 1 color developer I ($C\alpha = C$; $Z =$ carbamoyl, acyl, alkoxy carbonyl, aryloxy carbonyl; $Q =$ atoms required to form an unsatd. ring with $C\alpha$) and ≥ 1 coupler II ($C\beta = C$; $EWG =$ CN, carbamoyl, alkoxy carbonyl; $LG =$ releasing group by coupling-reaction with developer oxidation product; $M =$ atoms required to form 6-membered aromatic heterocyclic ring with $C\beta$). Images are formed by (1) heat-developing the material; (2) developing it in the presence of alkali generated by slightly soluble metal salt and its complexing agent; or
(3) developing it with an alkaline developer. The material shows improved color development, providing images with improved light, heat, and humidity stability.
IT 307496-50-0
RL: DEV (Device component use); USES (Uses)
(photog. film containing developer and coupler)

L4 ANSWER 8 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:822980 CAPLUS
DOCUMENT NUMBER: 133:367806
TITLE: Silver halide color photographic material containing specific coupler and image formation using same
INVENTOR(S): Uchida, Osamu; Ishiwata, Yasuhiro; Katsumata, Taiji
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

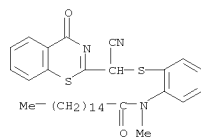
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000321732	A	20001124	JP 1999-127298	19990507
PRIORITY APPLN. INFO.:			JP 1999-127298	19990507

OTHER SOURCE(S): MARPAT 133:367806
GI

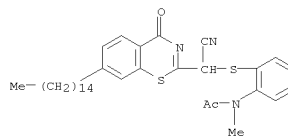


AB The title photog. material contains ≥ 1 coupler of the formula I ($C\beta = C$ atom; $EWG =$ CN, carbamoyl, alkoxy carbonyl; $M =$ atoms required to form an aromatic heterocycle along with $C\beta$; $LG =$ arylthio) in ≥ 1 of the hydrophilic colloid layers formed on a support. The material is heat-developed or developed under such a condition that alkali is generated by a slightly soluble metal salt and its complex-forming agent or by developing an alkaline processing solution to form images. The couplers show high coloring properties and stability and provides high quality color images with high sharpness and storage stability.
IT 307932-98-5
RL: DEV (Device component use); USES (Uses)
(photog. coupler having arylthio group)
RN 307932-98-5 CAPLUS
CN Acetamide, N-[2-[[cyano(4-oxo-7-pentadecyl-4H-1,3-benzothiazin-2-yl)methyl]thio]phenyl]-N-methyl- (CA INDEX NAME)

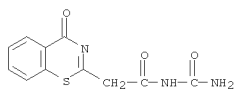
L4 ANSWER 7 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
RN 307496-50-0 CAPLUS
CN Hexadecanamide, N-[2-[[cyano(4-oxo-4H-1,3-benzothiazin-2-yl)methyl]thio]phenyl]-N-methyl- (CA INDEX NAME)



L4 ANSWER 8 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



L4 ANSWER 9 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2000:270189 CAPLUS
 DOCUMENT NUMBER: 133:59023
 TITLE: Activated nitriles in heterocyclic synthesis: facile synthesis of heteroarylthymine analogs and their nucleosides
 AUTHOR(S): Allam, Yehia A.; Chabaka, Laila M.; Nawwar, Galal A. M.
 CORPORATE SOURCE: Pesticide Laboratory, National Research Centre, Cairo,
 SOURCE: Egypt
 Heteroatom Chemistry (2000), 11(3), 209-212
 CODEN: HETCES; ISSN: 1042-7163
 PUBLISHER: John Wiley & Sons, Inc.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 133:59023
 AB 5-Heteroarylthymine analogs were synthesized via binucleophilic attack with bidentate thiols on the cyano group of cyanoacetylurea to form the heteroarylurea derivs. followed by their cyclization with formamide. Also, their nucleosides with 2,3,4,6-tetra-O-acetyl- α -D-glucopyranose were prepared
 IT 277754-11-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (synthesis of heteroarylthymine analogs and their nucleosides using activated nitriles)
 RN 277754-11-7 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetamide, N-(aminocarbonyl)-4-oxo- (CA INDEX NAME)



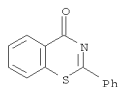
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE
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L4 ANSWER 10 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1993:522687 CAPLUS
 DOCUMENT NUMBER: 119:122687
 TITLE: Threshold composition of iron-cobalt alloys during their corrosion in inhibited sulfuric acid media
 Grigor'ev, V. P.; Gershanova, I. M.; Kravchenko, V. M.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov., Russia
 SOURCE: Zashchita Metallov (1992), 28(5), 833-6
 CODEN: ZAMEA9; ISSN: 0044-1856
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB Weight loss and electrochem. studies were conducted on Fe-(8-69.3) atomic% Co alloys in 0.5 M H2SO4 solns. containing 0.05-0.5 mM 2-phenyl-4-oxo-1,3-benzothiazine perchlorate (I). Alloys containing less than 18-23 atomic% Co behave more like Fe and those above the threshold composition have corrosion parameters approaching Co. The I adsorption on the alloys is described by the Freundlich isotherm.
 IT 97189-42-9
 RL: PROC (Process)
 (corrosion inhibition by, of iron-cobalt alloys in sulfuric acid solns.)
 RN 97189-42-9 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-phenyl-, perchlorate (9CI) (CA INDEX NAME)
 CM 1
 CRN 7601-90-3
 CMF C1 H O4



CM 2
 CRN 7474-08-0
 CMF C14 H9 N O S

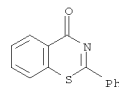
L4 ANSWER 10 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



L4 ANSWER 11 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1993:416999 CAPLUS
 DOCUMENT NUMBER: 119:16999
 TITLE: Threshold composition of iron-cobalt alloy as a function of solution temperature
 Grigor'ev, V. P.; Gershanova, I. M.; Kravchenko, V. M.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov, Russia
 SOURCE: Elektrokimiya (1993), 29(2), 273-5
 CODEN: ELKKAX; ISSN: 0424-8570
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB The influence of the temperature on the threshold composition of an Fe-Co alloy in inhibited H2SO4 solns. was studied. Potentiostatic and photocolormetric methods were used to study the anodic dissoln. of cast Fe-Co alloys (cCo = 1.7-69.3 mol.%) in 0.5M H2SO4 containing 1 + 10-4M 2-phenyl-4-oxo-1,3-benzothiazinium perchlorate at temps. of 25-40° in the active range of potentials E (-0.25 to 0.05 V). The reference electrode was saturated Ag chloride.
 IT 97189-42-9
 RL: PRP (Properties)
 (anodic dissoln. of cobalt-iron alloys in sulfuric acid containing)
 RN 97189-42-9 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-phenyl-, perchlorate (9CI) (CA INDEX NAME)
 CM 1
 CRN 7601-90-3
 CMF C1 H O4



CM 2
 CRN 7474-08-0
 CMF C14 H9 N O S

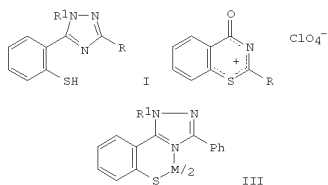


L4 ANSWER 12 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1992:600467 CAPLUS
 DOCUMENT NUMBER: 117:200467
 TITLE: Threshold concentration of binary iron-cobalt alloys during their anodic dissolution in the presence of surfactants
 AUTHOR(S): Grigor'ev, V. P.; Kravchenko, V. M.; Gershanova, I. M.; Aksenova, N. G.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov, Russia
 SOURCE: Zashchita Metallov (1992), 28(3), 390-4
 CODEN: ZAMEA9; ISSN: 0044-1856
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB In the presence of surfactants at a predetd. alloy composition, it is possible to transfer the control of its dissoln. from 1 component to the other, using Fe-Co alloys as an example. Thus, the anodic dissoln. characteristics were studied of cast Fe-Co alloy in pure and inhibited solns. of H2SO4. The Fe-Co alloys contained 1.8, 7.9, 18.8, 24.7, 32.7, 40.2, and 70.8 weight% Co as solid solns. For comparison, samples of Armco Fe and Co of grade "K-O" were tested in 0.5M H2SO4 at E (in the active region) of -0.2 to +0.05 V/vs. a normal H electrode. The surfactant additive which was used was 2-phenyl-4-oxo-1,3-benzothiazinium perchlorate. The introduction into the solution of the surfactant, changing (in different ways) the angular coeffs. of the anodic curves log j vs. E for Co and Fe, lead to the appearance of a threshold composition of the Fe-Co alloy, at which control of the dissoln. kinetics of the alloy passes from 1 compound to the other.
 IT 97189-42-9, 2-Phenyl-4-oxo-1,3-benzothiazinium perchlorate
 RL: PRP (Properties)
 (anodic dissoln. of iron-cobalt alloys in presence of, threshold concentration of binary alloys in relation to)
 RN 97189-42-9 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-phenyl-, perchlorate (9CI) (CA INDEX NAME)
 CM 1
 CRN 7601-90-3
 CMP C1 H O4



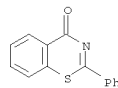
CM 2

L4 ANSWER 13 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1992:214422 CAPLUS
 DOCUMENT NUMBER: 116:214422
 TITLE: Recyclization of 4-oxo-1,3-benzothiazinium salts. Synthesis of o-(mercaptophenyl)-1,2,4-triazoles and their metal chelates
 AUTHOR(S): Ryabukhin, Yu. I.; Korzhavina, O. B.; Garnovskii, A. D.; Knyazev, A. P.; Terent'ev, P. B.
 CORPORATE SOURCE: Nauchno-Issed. Inst. Fiz. Org. Khim., Rostov-on-Don, 344090, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1991), (9), 1220-6
 CODEN: KGSSAQ; ISSN: 0453-8234
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 116:214422
 GI



AB 5-(o-Mercaptophenyl)-1,2,4-triazoles I (R = Ph, R1 = H, Ph, PhCH2; R = PhCH2, p-O2NC6H4, R1 = Ph) were prepared (50-80% yields) by recyclization of 4-oxo-1,3-benzothiadiazinium perchlorates II with R1NHNH2 in refluxing AcOH. Treating I in a min. volume of MeOH with M(OAc)2 (M = Co, Ni, Zn) gave 53-84% complexes III (R1 = Ph, M = Co, Ni, Zn, R1 = PhCH2, M = Co, Ni).
 IT 97189-42-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (recyclization of, by hydrazines)
 RN 97189-42-9 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-phenyl-, perchlorate (9CI) (CA INDEX NAME)
 CM 1
 CRN 7601-90-3
 CMP C1 H O4

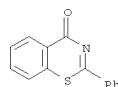
L4 ANSWER 12 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 CRN 7474-08-0
 CMP C14 H9 N O S



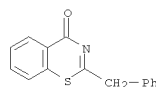
L4 ANSWER 13 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CM 2
 CRN 7474-08-0
 CMP C14 H9 N O S



IT 97189-44-1 140455-64-7
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (recyclization of, by phenylhydrazine)
 RN 97189-44-1 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-(phenylmethyl)-, perchlorate (9CI) (CA INDEX NAME)
 CM 1
 CRN 67433-04-9
 CMP C15 H11 N O S



CM 2
 CRN 7601-90-3
 CMP C1 H O4



L4 ANSWER 13 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

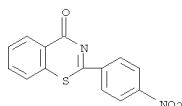
RN 140455-64-7 CAPLUS

CN 4H-1,3-Benzothiazin-4-one, 2-(4-nitrophenyl)-, monoperchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 106274-04-8

CMF C14 H8 N2 O3 S



CM 2

CRN 7601-90-3

CMF C1 H O4



L4 ANSWER 14 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:184536 CAPLUS

DOCUMENT NUMBER: 116:184536

TITLE: Silver halide photographic material with good storage stability

INVENTOR(S): Ishiguro, Seiji; Shishido, Tadao; Meguro, Kanji

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

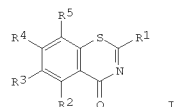
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03229241	A	19911011	JP 1990-24227	19900202
PRIORITY APPLN. INFO.:			JP 1990-24227	19900202

GI



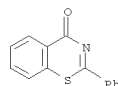
AB The title material contains benzothiazinone I [R1 = (substituted) alkyl, aryl; R2-5 = H, halo, OH, (substituted) alkyl, alkoxy, amino, acylamide, sulfonamide, carbamoyl, sulfamoyl, carboxyl, sulfonyl, carboxylate, sulfonate; R2 and R3, R3 and R4, and R4 and R5 may form 5- or 6-membered ring.] in the emulsion or other hydrophilic colloid layers.

IT 7474-08-0 140429-89-6

RL: TEM (Technical or engineered material use); USES (Uses) (photog. material containing, for storage stability)

RN 7474-08-0 CAPLUS

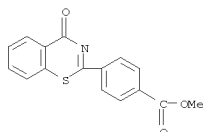
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)



RN 140429-89-6 CAPLUS

CN Benzoic acid, 4-(4-oxo-4H-1,3-benzothiazin-2-yl)-, methyl ester (CA INDEX NAME)

L4 ANSWER 14 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



L4 ANSWER 15 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:93722 CAPLUS

DOCUMENT NUMBER: 116:93722

TITLE: Electroreduction of organic compounds. 19.

Formation of benzoannelated sulfur heterocycles by intramolecular cathodic cyclization of dithiocarboxylic esters

AUTHOR(S): Gade, Thomas; Streek, Michael; Voss, Juergen

CORPORATE SOURCE: Inst. Org. Chem., Univ. Hamburg, Hamburg, D-2000/13, Germany

SOURCE: Chemische Berichte (1992), 125(1), 127-41

CODEN: CHBEAM; ISSN: 0009-2940

DOCUMENT TYPE: Journal

LANGUAGE: German

OTHER SOURCE(S): CASREACT 116:93722

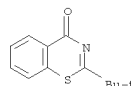
AB Cathodic reduction of aryl and benzyl dithiopivaloates and related dithioesters with leaving groups at the benzene ring or a side chain yield the sulfur heterocycles. The product depended on the nature of the starting material and the reaction conditions. In the case of α -oxo-dithioester, thioindigo is formed. The thioamides show a strong tendency to reductive dehalogenation but the S,N-heterocycles are also formed in minor amts. The formation of the rearranged products is discussed in terms of C,S-splitting in the primarily formed radical anion and subsequent C,C-coupling of the fragments and follow-up reactions.

IT 137092-58-1P

RL: PREP (Preparation) (preparation of, electrochem.)

RN 137092-58-1 CAPLUS

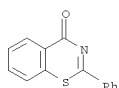
CN 4H-1,3-Benzothiazin-4-one, 2-(1,1-dimethylethyl)- (CA INDEX NAME)



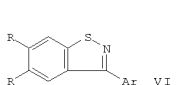
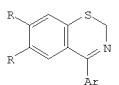
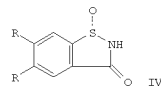
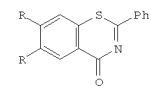
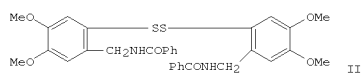
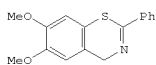
L4 ANSWER 16 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1992:21013 CAPLUS
 DOCUMENT NUMBER: 116:21013
 TITLE: A new recyclization of 1,3-heterocyclic cations to benzimidazolium and perimidinium cations
 AUTHOR(S): Vedernikova, I. V.; Konstantinchenko, A. A.; Ryabukhin, Yu. I.
 CORPORATE SOURCE: Inst. Org. Phys., Univ. Rostov, Rostov-on-Don, 344113,
 SOURCE: USSR
 100(2), Bulletin des Societes Chimiques Belges (1991),
 175-81
 CODEN: BSCBAG; ISSN: 0037-9646
 DOCUMENT TYPE: Journal
 LANGUAGE: French
 OTHER SOURCE(S): CASREACT 116:21013
 AB Reaction of 1,3-heterocyclic cations, such as benzoxazinonium, benzothiazolium, or dithiolanium cations, with o-phenylenediamines or 1,8-naphthalenediamines gave benzimidazolium and perimidinium cations.
 IT 97189-42-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with phenylenediamines and naphthalenediamines)
 RN 97189-42-9 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-phenyl-, perchlorate (9CI) (CA INDEX NAME)
 CM 1
 CRN 7601-90-3
 CMF C1 H O4



CM 2
 CRN 7474-08-0
 CMF C14 H9 N O S



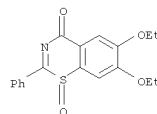
L4 ANSWER 17 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1990:215913 CAPLUS
 DOCUMENT NUMBER: 112:215913
 TITLE: Ring-transformation reactions of 1,3-benzothiazines. Part 5. Saturated heterocycles. Part 140. Synthesis
 oF benisothiazoles by the oxidative ring contraction of 2-aryl-4H- and 4-aryl-2H-1,3-benzothiazines
 AUTHOR(S): Szabo, Janos; Szucs, Erzsébet; Fodor, Lajos; Katocs, Agnes; Bernath, Gabor
 CORPORATE SOURCE: Gyogyszereszi Vegytani Intez., Szent-Gyorgyi Albert Orvostudo. Egyet., Szeged, 6701, Hung.
 SOURCE: Magyar Kemiai Polyoirat (1989), 95(11), 455-61
 CODEN: MGRFA3; ISSN: 0025-0155
 DOCUMENT TYPE: Journal
 LANGUAGE: Hungarian
 OTHER SOURCE(S): CASREACT 112:215913
 GI



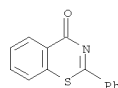
AB Dimethoxyphenylbenzothiazine (I) was oxidized with H₂O₂ to yield the disulfide (II). RMnO₄ oxidation of I gave benzothiazin-4-one (III) (R = OMe); which was oxidized with calculated amts. of perbenzoic acid to obtain the corresponding 1-oxide and 1,1-dioxide. Oxidation of III (R = MeO, EtO, H) with NaIO₄ involved ring contraction, yielding benzisothiazolone 1-oxides (IV). A similar ring transformation was observed in the oxidation of aryl benzothiazines (V) (R = alkoxy, Ar = substituted Ph), resulting in the formation of arylalkoxybenzisothiazoles (VI). The mechanism of these ring transformations is discussed.

L4 ANSWER 16 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

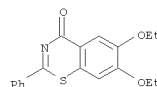
L4 ANSWER 17 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 IT 117999-13-0
 RL: PRP (Properties)
 (intermediacy of, in oxidative ring closure of arylbenzothiazine derivative)
 RN 117999-13-0 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 6,7-diethoxy-2-phenyl-, 1-oxide (CA INDEX NAME)



IT 7474-08-0 101734-42-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (oxidative ring contraction of, with sodium periodate)
 RN 7474-08-0 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)

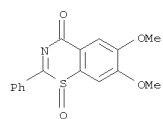


RN 101734-42-3 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 6,7-diethoxy-2-phenyl- (CA INDEX NAME)

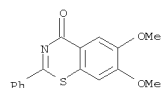


IT 117999-12-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and hydrogenation/ring-contraction sequence of)
 RN 117999-12-9 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 6,7-dimethoxy-2-phenyl-, 1-oxide (CA INDEX NAME)

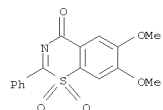
L4 ANSWER 17 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



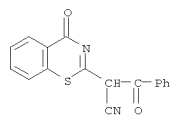
IT 56755-15-8P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and oxidation and oxidative ring contraction of, with sodium periodate)
 RN 56755-15-8 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 6,7-dimethoxy-2-phenyl- (CA INDEX NAME)



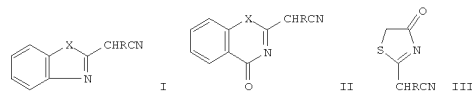
IT 117999-14-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 117999-14-1 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 6,7-dimethoxy-2-phenyl-, 1,1-dioxide (CA INDEX NAME)



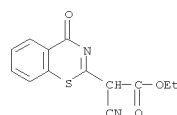
L4 ANSWER 18 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



L4 ANSWER 18 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1989:135187 CAPLUS
 DOCUMENT NUMBER: 110:135187
 TITLE: Activated nitriles in heterocyclic synthesis: a new approach for the synthesis of thiazinone, quinoxalinone, and benzimidazole derivatives
 AUTHOR(S): Ibrahim, Nadia Sobhy; Shams, Hoda Zaki; Mohamed, Mohamed Hassan; Elnagdi, Mohamed Hilmy
 CORPORATE SOURCE: Fac. Sci., Cairo Univ., Cairo, Egypt
 SOURCE: Chemistry & Industry (London, United Kingdom) (1988), (17), 563-4
 CODEN: CHINAG; ISSN: 0009-3068
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 110:135187
 GI

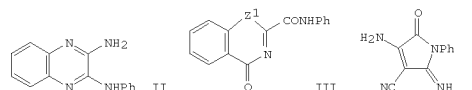


AB Cyclocondensation of Cl3CC(NH2)=CRN (R = CO2Et, Bz) with 1,2-R1C6H4R2 (R1 = NH2, R2 = NH2, OH; R1 = SH, NH2, R2 = CO2H) or HSCH2CO2H gave heterocycles I (X = NH, O) and II (X = S, NH) and thiazole III, resp.
 IT 119707-18-5P 119707-23-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 119707-18-5 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetic acid, α -cyano-4-oxo-, ethyl ester (CA INDEX NAME)

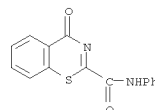


RN 119707-23-2 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, α -benzoyl-4-oxo- (CA INDEX NAME)

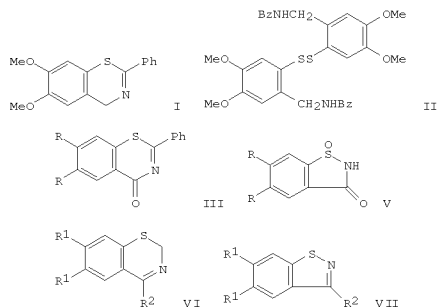
L4 ANSWER 19 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1989:38956 CAPLUS
 DOCUMENT NUMBER: 110:38956
 TITLE: Nitriles in heterocyclic synthesis: 1-cyanoformanilide as precursor for a variety of heterocyclic ring systems
 AUTHOR(S): Sherif, Sherif Mourad; Mohareb, Rafaat Milad; Elgemeie, Galal Eldin H.; Singh, Rajendra Prasad
 CORPORATE SOURCE: Fac. Sci., Cairo Univ., Giza, Egypt
 SOURCE: Heterocycles (1988), 27(7), 1579-83
 CODEN: HETCYM; ISSN: 0385-5414
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 110:38956
 GI



AB PhNHCOCN (I) was converted to quinoxaline derivative II and other heterocycles
 III (Z1 = O, NH). I was treated with o-phenylenediamine in DMF containing piperidine to give II. III (Z1 = O) was prepared from I, salicylic acid, and Et3N in EtOH. Pyrrolinone IV was obtained from I and CH2(CN)2.
 IT 118372-86-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 118372-86-4 CAPLUS
 CN 4H-1,3-Benzothiazine-2-carboxamide, 4-oxo-N-phenyl- (CA INDEX NAME)

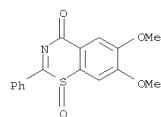


L4 ANSWER 20 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1989:8142 CAPLUS
 DOCUMENT NUMBER: 110:8142
 TITLE: Ring transformations of 1,3-benzothiazines. 5.
 Synthesis of benzisothiazoles by the oxidative ring
 contraction of 2-aryl-4H- and 4-aryl-2H-1,3-
 benzothiazines
 AUTHOR(S): Szabo, Janos; Szucs, Erzsebet; Fodor, Lajos; Katocs,
 Agnes; Bernath, Gabor; Sohar, Pal
 CORPORATE SOURCE: Inst. Pharm. Chem., Albert Szent-Gyorgyi Med. Univ.,
 Szeged, H-6701, Hung.
 SOURCE: Tetrahedron (1988), 44(10), 2985-92
 CODEN: TETRAH; ISSN: 0040-4020
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 110:8142
 GI

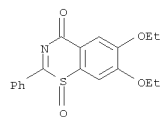


AB 4H-1,3-Benzothiazine I was oxidized with H₂O₂ to give disulfide II,
 whereas the oxidation of I with KMnO₄ gave 4H-1,3-benzothiazine-4-one
 III (R = OMe) (IV). Oxidation of IV with calculated amts. of perbenzoic acid
 gave the
 corresponding 1-oxide and 1,1-dioxide. III (R = OMe, H, OEt) were
 oxidized with NaIO₄ to give 1,2-benzisothiazol-3(2H)-ones V (R = same).
 2H-1,3-Benzothiazines VI [R₁ = OMe, R₂ = Ph, C₆H₄Me-4, C₆H₄Cl-2,
 C₆H₄Cl-4,
 C₆H₃(OMe)2-3,4', R₁ = OEt, R₂ = Ph] were oxidized with NaIO₄ to give the
 corresponding 1,2-benzisothiazoles VII.
 IT 7474-08-0 101734-42-3

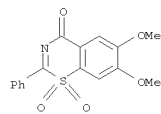
L4 ANSWER 20 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



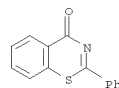
IT 117999-13-0P 117999-14-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 117999-13-0 CAPLUS
 CN 4H-1,3-Benzothiazine-4-one, 6,7-diethoxy-2-phenyl-, 1-oxide (CA INDEX
 NAME)



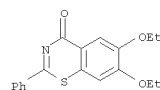
RN 117999-14-1 CAPLUS
 CN 4H-1,3-Benzothiazine-4-one, 6,7-dimethoxy-2-phenyl-, 1,1-dioxide (CA
 INDEX NAME)



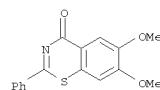
L4 ANSWER 20 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (oxidative ring contraction of)
 RN 7474-08-0 CAPLUS
 CN 4H-1,3-Benzothiazine-4-one, 2-phenyl- (CA INDEX NAME)



RN 101734-42-3 CAPLUS
 CN 4H-1,3-Benzothiazine-4-one, 6,7-diethoxy-2-phenyl- (CA INDEX NAME)

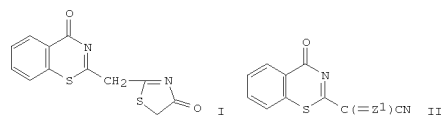


IT 56755-15-8P 117999-12-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and oxidative ring contraction of)
 RN 56755-15-8 CAPLUS
 CN 4H-1,3-Benzothiazine-4-one, 6,7-dimethoxy-2-phenyl- (CA INDEX NAME)

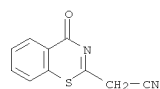


RN 117999-12-9 CAPLUS
 CN 4H-1,3-Benzothiazine-4-one, 6,7-dimethoxy-2-phenyl-, 1-oxide (CA INDEX
 NAME)

L4 ANSWER 21 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1987:515548 CAPLUS
 DOCUMENT NUMBER: 107:115548
 TITLE: Nitriles in heterocyclic synthesis: a route for
 synthesis of functionally substituted thiazinones
 AUTHOR(S): Abed, Nosrat M.; Ibrahim, Nadia S.; Aziz, Suzan I.
 CORPORATE SOURCE: Chem. Dep., Fac. Sci., Giza, Egypt
 SOURCE: Revista Portuguesa de Quimica (1985), 27(3-4), 459-62
 CODEN: RPTQAT; ISSN: 0035-0419
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 107:115548
 GI

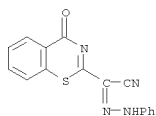


AB 1,3-Benzothiazines I and II (Z₁ = NNHPh, CHPh) were prepared The
 reaction
 of 2-HSC₆H₄CO₂H with a thiazolineacetonitrile derivative gave I. II (Z₁
 =
 CHPh) was obtained from 2-HSC₆H₄CO₂H and PhCH₂C(CN)₂.
 IT 67433-02-7
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (cycloaddn.-cyclocondensation and condensation reactions of)
 RN 67433-02-7 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo- (CA INDEX NAME)

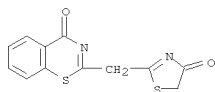


IT 107009-63-2P 109419-37-6P 109419-38-7P
 109419-39-8P 109419-40-1P 109419-41-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 107009-63-2 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo-α-(phenylhydrazono)-
 (9CI) (CA INDEX NAME)

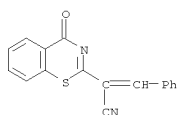
L4 ANSWER 21 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 109419-37-6 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-[(4,5-dihydro-4-oxo-2-thiazolyl)methyl]-
 (CA INDEX NAME)

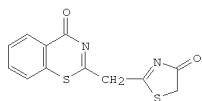


RN 109419-38-7 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo-α-(phenylmethylene)- (CA
 INDEX NAME)

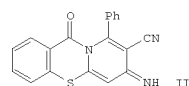


RN 109419-39-8 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, α-[hydroxy(phenylamino)methylen
 e]-4-oxo- (CA INDEX NAME)

L4 ANSWER 22 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1987:458953 CAPLUS
 DOCUMENT NUMBER: 107:58953
 TITLE: Nitriles in heterocyclic synthesis: a route for
 synthesis of functionally substituted thiazinones
 AUTHOR(S): Moustafa Abed, Nosrat; Ibrahim, Nadia Sobhi
 CORPORATE SOURCE: Fac. Sci., Cairo Univ., Giza, Egypt
 SOURCE: Journal of the Chemical Society of Pakistan (1986),
 8(3), 319-22
 CODEN: JCSPDF; ISSN: 0253-5106
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 107:58953
 GI

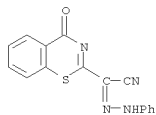


I



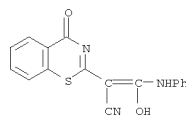
II

AB The reaction of thiosalicylic acid with a variety of activated nitriles
 is described. Several new benzo[e]-1,3-thiazinones, e.g. I and II are
 reported.
 IT 107009-63-2P 109419-37-6P 109419-38-7P
 109419-39-8P 109419-40-1P 109419-41-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 107009-63-2 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo-α-(phenylhydrazono)-
 (9CI) (CA INDEX NAME)

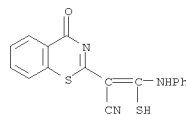


RN 109419-37-6 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-[(4,5-dihydro-4-oxo-2-thiazolyl)methyl]-
 (CA INDEX NAME)

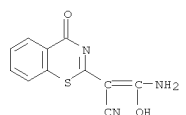
L4 ANSWER 21 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



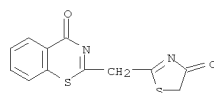
RN 109419-40-1 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, α-[mercapto(phenylamino)methyle
 ne]-4-oxo- (CA INDEX NAME)



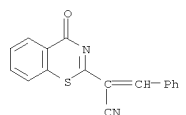
RN 109419-41-2 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, α-(aminohydroxymethylene)-4-oxo-
 (CA INDEX NAME)



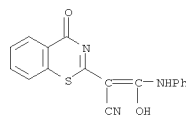
L4 ANSWER 22 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



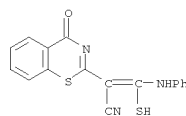
RN 109419-38-7 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo-α-(phenylmethylene)- (CA
 INDEX NAME)



RN 109419-39-8 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, α-[hydroxy(phenylamino)methylen
 e]-4-oxo- (CA INDEX NAME)

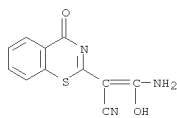


RN 109419-40-1 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, α-[mercapto(phenylamino)methyle
 ne]-4-oxo- (CA INDEX NAME)

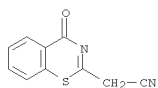


RN 109419-41-2 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, α-(aminohydroxymethylene)-4-oxo-
 (CA INDEX NAME)

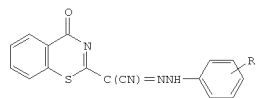
L4 ANSWER 22 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



IT 67433-02-7
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reactions of)
 RN 67433-02-7 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo- (CA INDEX NAME)

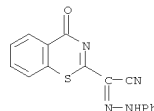


L4 ANSWER 23 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1987:101585 CAPLUS
 DOCUMENT NUMBER: 106:101585
 TITLE: Ionization and electroreduction of some
 benzothiazin-4-one azo dyes
 AUTHOR(S): Abed, N. M.; Nashed, B.; Fahmy, H. M.; Azzem, M.
 Abdel
 CORPORATE SOURCE: Fac. Sci., Cairo Univ., Giza, Egypt
 SOURCE: Monatshefte fuer Chemie (1986), 117(5), 599-605
 CODEN: MOCMB7; ISSN: 0026-9247
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



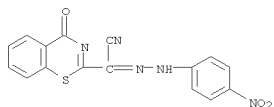
AB The pKa values of benzothiazin-4-ones I (R = H, 3-Cl, 4-Cl, 3-Me, 4-Me, 3-NO2, 4-NO2) together with a model 2-(cyanomethyl)-4H-3,1-benzothiazin-4-one were determined spectrophotometrically in alc. buffered media. These values were correlated to different σ sets. The polarog. behavior of I (R = H, 4-NO2) was studied in detail. The obtained data showed that I (R = H) is reduced via a 2-electron process to the corresponding hydrazo form, which was stabilized through H bonding.

IT 107009-63-2 107009-67-6
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (ionization and polarog. reduction of)
 RN 107009-63-2 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo- α -(phenylhydrazono)- (9CI) (CA INDEX NAME)

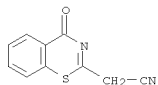


RN 107009-67-6 CAPLUS

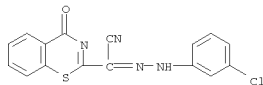
L4 ANSWER 23 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 CN 4H-1,3-Benzothiazine-2-acetonitrile, α -[(4-nitrophenyl)hydrazono]-4-oxo- (9CI) (CA INDEX NAME)



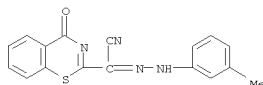
IT 67433-02-7 107009-64-3 107009-65-4
 107009-66-5 107032-75-7 107032-76-8
 RL: PROC (Process)
 (ionization of, in alc. buffered media)
 RN 67433-02-7 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo- (CA INDEX NAME)



RN 107009-64-3 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, α -[(3-chlorophenyl)hydrazono]-4-oxo- (9CI) (CA INDEX NAME)

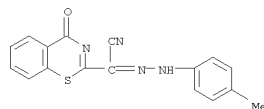


RN 107009-65-4 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, α -[(3-methylphenyl)hydrazono]-4-oxo- (9CI) (CA INDEX NAME)

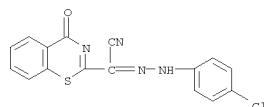


RN 107009-66-5 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, α -[(4-methylphenyl)hydrazono]-4-

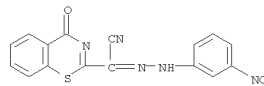
L4 ANSWER 23 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 oxo- (9CI) (CA INDEX NAME)



RN 107032-75-7 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, α -[(4-chlorophenyl)hydrazono]-4-oxo- (9CI) (CA INDEX NAME)



RN 107032-76-8 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, α -[(3-nitrophenyl)hydrazono]-4-oxo- (9CI) (CA INDEX NAME)



L4 ANSWER 24 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:544960 CAPLUS
 DOCUMENT NUMBER: 105:144960
 ORIGINAL REFERENCE NO.: 105:23209a,23212a
 TITLE: The new ligand
 1,3-diphenyl-5-(o-mercaptophenyl)-1,2,4-triazole. Preparation and mode of coordination to metals
 AUTHOR(S): Garnovskii, A. D.; Korzhavina, O. B.; Ryabukhin, Yu. I.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov, USSR
 SOURCE: Koordinatsionnaya Khimiya (1986), 12(6), 853-4
 CODEN: KOKHDC; ISSN: 0132-344X
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB 1,3-Diphenyl-5-(o-mercaptophenyl)-1,2,4-triazole (HL) was prepared by boiling in HOAc solution 4-hydroxy-1,3-benzothiazinium perchlorate and phenylhydrazine with subsequent treating with H₂O. ML₂ (M = Co, Ni) were prepared and characterized by IR spectra. ML₂ is square planar whereas CoL₂ is polymeric octahedral. The ligand coordinates through the S and N(4) atoms. Aerial oxidation of HL gave the corresponding disulfide.
 IT 97189-42-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with phenylhydrazine)
 RN 97189-42-9 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-phenyl-, perchlorate (9CI) (CA INDEX NAME)

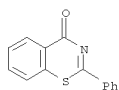
CM 1

CRN 7601-90-3
 CMF C1 H O4



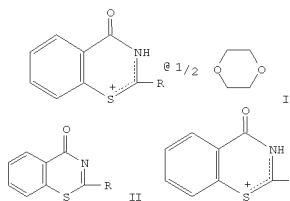
CM 2

CRN 7474-08-0
 CMF C14 H9 N O S



L4 ANSWER 25 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1985:437436 CAPLUS
 DOCUMENT NUMBER: 103:37436
 ORIGINAL REFERENCE NO.: 103:6075a,6078a
 TITLE: Synthesis of 4-oxo-1,3-benzothiazines and their salts
 AUTHOR(S): Korzhavina, O. B.; Ryabukhin, Yu. I.; Garnovskii, A. D.; Shavel, I. I.
 CORPORATE SOURCE: Rostov. Gos. Univ., Rostov-on-Don, 334077, USSR
 SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1985), (4), 562-3
 CODEN: KGSSAQ; ISSN: 0453-8234
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 103:37436
 GI



AB Cyclocondensation of o-HSC₆H₄CO₂H with RCN (R = Ph, PhCH₂) in dioxane containing HCl and 70% HClO₄-Ac₂O gave 60-70% complexes I which were treated

with H₂O or Et₃N to give benzothiazines II; recrystn. of the complexes from AcOH or the action of heat gave 97 and 75% perchlorates III which could also be converted to II.

IT 97189-42-9P 97189-44-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and hydrolysis of)
 RN 97189-42-9 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-phenyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 7601-90-3
 CMF C1 H O4

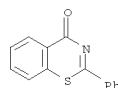


L4 ANSWER 24 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

L4 ANSWER 25 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CM 2

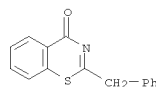
CRN 7474-08-0
 CMF C14 H9 N O S



RN 97189-44-1 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-(phenylmethyl)-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 67433-04-9
 CMF C15 H11 N O S



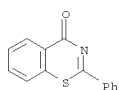
CM 2

CRN 7601-90-3
 CMF C1 H O4

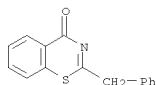


IT 7474-08-0P 67433-04-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction with perchloric acid)
 RN 7474-08-0 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)

L4 ANSWER 25 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 67433-04-9 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-(phenylmethyl)- (CA INDEX NAME)



IT 97189-43-0P 97189-45-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation, hydrolysis, and thermal decomposition of)
 RN 97189-43-0 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-phenyl-, perchlorate, compd. with 1,4-dioxane (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 123-91-1
 CMF C4 H8 O2



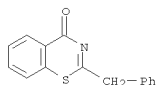
CM 2

CRN 97189-42-9
 CMF C14 H9 N O S . Cl H O4

CM 3

CRN 7601-90-3
 CMF Cl H O4

L4 ANSWER 25 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CM 4

CRN 7601-90-3
 CMF Cl H O4

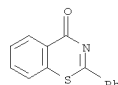


L4 ANSWER 25 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CM 4

CRN 7474-08-0
 CMF Cl4 H9 N O S



RN 97189-45-2 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-(phenylmethyl)-, perchlorate, compd. with 1,4-dioxane (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 123-91-1
 CMF C4 H8 O2



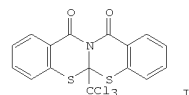
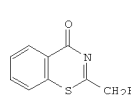
CM 2

CRN 97189-44-1
 CMF C15 H11 N O S . Cl H O4

CM 3

CRN 67433-04-9
 CMF Cl5 H11 N O S

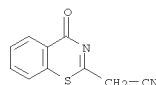
L4 ANSWER 26 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1985:6351 CAPLUS
 DOCUMENT NUMBER: 102:6351
 ORIGINAL REFERENCE NO.: 102:1151a,1154a
 TITLE: Nitriles in heterocyclic synthesis: a new approach for the synthesis of thiazinones
 AUTHOR(S): Ibrahim, Nadia S.; Abed, Nosrat M.; Kandeel, Zaghloul E.
 CORPORATE SOURCE: Fac. Sci., Cairo Univ., Giza, Egypt
 SOURCE: Heterocycles (1984), 22(8), 1677-82
 CODEN: HTCYAM; ISSN: 0385-5414
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 102:6351
 GI



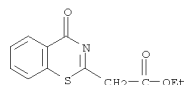
AB The benzothiazinones I (R = cyano, CONH2, CONHPh, CO2Et) were prepared in 60-90% yields by cyclization of o-HSC6H4CO2H with RCH2CN. Reaction of o-HSC6H4CO2H with Cl3CCN gave the thiazinone derivative II in 80% yield.

IT 67433-02-7P 67433-03-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, with thiosalicylic acid)

RN 67433-02-7 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo- (CA INDEX NAME)

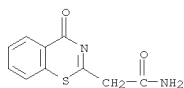


RN 67433-03-8 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetic acid, 4-oxo-, ethyl ester (CA INDEX NAME)

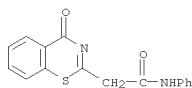


L4 ANSWER 26 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

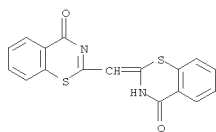
IT 67433-05-0P 93666-41-2P 93666-42-3P
 93666-44-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 67433-05-0 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetamide, 4-oxo- (CA INDEX NAME)



RN 93666-41-2 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetamide, 4-oxo-N-phenyl- (CA INDEX NAME)

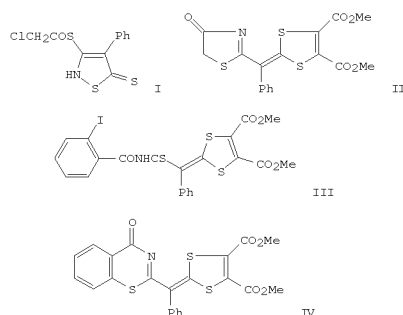


RN 93666-42-3 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2,2-dihydro-2-[(4-oxo-4H-1,3-benzothiazin-2-yl)methylene]- (CA INDEX NAME)



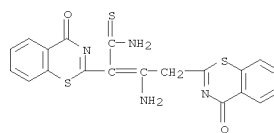
RN 93666-44-5 CAPLUS
 CN 4H-1,3-Benzothiazine-2-ethanethioamide, α -[1-amino-2-(4-oxo-4H-1,3-benzothiazin-2-yl)ethylidene]-4-oxo- (CA INDEX NAME)

L4 ANSWER 27 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1982:472312 CAPLUS
 DOCUMENT NUMBER: 97:72312
 ORIGINAL REFERENCE NO.: 97:12105a,12108a
 TITLE: Studies of heterocyclic chemistry. Part 25.
 Intramolecular cyclizations of N-acylarylethanethioamides leading to thiazoles, 4H-1,3-thiazines, 4H-pyrido[3,2-e]-1,3-thiazines, and 4H-1,3-benzothiazines
 AUTHOR(S): Nishiwaki, Tarozaemon; Kawamura, Etsuko; Abe, Noritaka; Sasaoka, Yoshiro; Kochi, Hirafumi; Soneda, Kazumi; Nakamura, Reiko
 CORPORATE SOURCE: Dep. Chem., Yamaguchi Univ., Yamaguchi City, 753, Japan
 SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1982), (5), 1239-44
 CODEN: JCPRB4; ISSN: 0300-922X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 97:72312
 GI

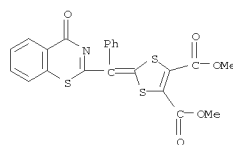


AB Cycloaddn. reactions of 4-aryl-3-haloacylthio-, 4-aryl-3-(2-chloronitroacylthio)-, and 4-aryl-3-(o-halobenzoylthio)-3-isothiazoline-5-thiones with acetylenes gave (oxodihydrothiazolymethylene)-, (oxodihydrothiazinylmethylene)-, and (oxopyridothiazinylmethylene)dithiane s. E.g., refluxing isothiazolinethione I with MeO2CC.tplbond.CO2Me gave 62% thiazolone II. Intramol. photochem. cyclocondensation reactions of N-o-halobenzoyl(1,3-dithiol-2-ylidene)arylethanethioamides gave oxobenzothiazinylmethylenedithioles. E.g., irradiation of

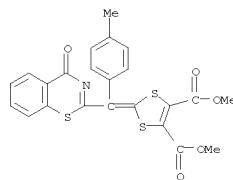
L4 ANSWER 26 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



L4 ANSWER 27 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 iodobenzoylthioamide III in THF under N for 10 h gave 67% benzothiazinone IV.
 IT 78959-04-3P 78959-05-4P 78959-06-5P
 78959-07-6P 82491-22-3P 82491-23-4P
 82491-24-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 78959-04-3 CAPLUS
 CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-oxo-4H-1,3-benzothiazin-2-yl)phenylmethylene]-, dimethyl ester (9CI) (CA INDEX NAME)

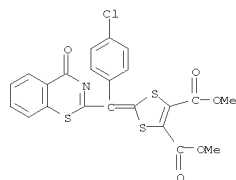


RN 78959-05-4 CAPLUS
 CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-methylphenyl)(4-oxo-4H-1,3-benzothiazin-2-yl)methylene]-, dimethyl ester (9CI) (CA INDEX NAME)

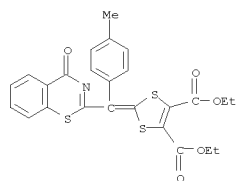


RN 78959-06-5 CAPLUS
 CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-chlorophenyl)(4-oxo-4H-1,3-benzothiazin-2-yl)methylene]-, dimethyl ester (9CI) (CA INDEX NAME)

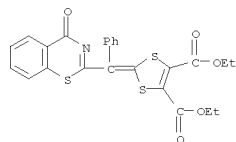
L4 ANSWER 27 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 78959-07-6 CAPLUS
 CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-methylphenyl)(4-oxo-4H-1,3-benzothiazin-2-yl)methylene]-, diethyl ester (9CI) (CA INDEX NAME)

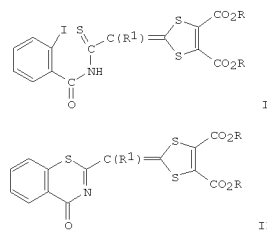


RN 82491-22-3 CAPLUS
 CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-oxo-4H-1,3-benzothiazin-2-yl)phenylmethylene]-, diethyl ester (9CI) (CA INDEX NAME)



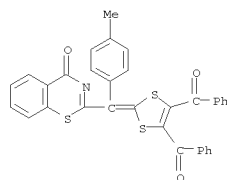
RN 82491-23-4 CAPLUS

L4 ANSWER 28 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1981:515430 CAPLUS
 DOCUMENT NUMBER: 95:115430
 ORIGINAL REFERENCE NO.: 95:19373a,19376a
 TITLE: A new and efficient approach to a ring that utilizes the photocyclization of N-o-iodobenzoylthioamides: the ring transformation of isothiazoles
 AUTHOR(S): Nishiwaki, Tarozaemon; Kawamura, Etsuko; Abe, Noritaka; Sasaoka, Yoshiro; Kochi, Hirafumi
 CORPORATE SOURCE: Fac. Sci., Yamaguchi Univ., Yamaguchi, 753, Japan
 SOURCE: Heterocycles (1981), 16(7), 1203-4
 CODEN: HCYAM; ISSN: 0385-5414
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 95:115430
 GI

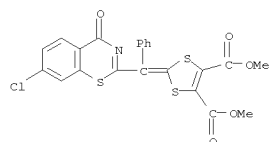


AB Irradiation of iodobenzoylthioamides I (R = Me, Et; R1 = Ph, 4-MeC6H4, 4-ClC6H4) in THF gave 83-93% benzothiazinones II.
 IT 78959-04-3P 78959-05-4P 78959-06-5P
 78959-07-6P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 78959-04-3 CAPLUS
 CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-oxo-4H-1,3-benzothiazin-2-yl)phenylmethylene]-, dimethyl ester (9CI) (CA INDEX NAME)

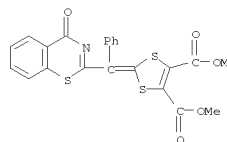
L4 ANSWER 27 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
 CN 4H-1,3-Benzothiazin-4-one, 2-[(4,5-dibenzoyl-1,3-dithiol-2-ylidene)(4-methylphenyl)methyl]- (CA INDEX NAME)



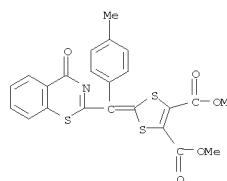
RN 82491-24-5 CAPLUS
 CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(7-chloro-4-oxo-4H-1,3-benzothiazin-2-yl)phenylmethylene]-, dimethyl ester (9CI) (CA INDEX NAME)



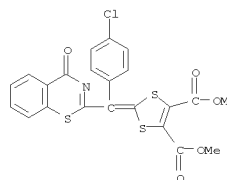
L4 ANSWER 28 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 78959-05-4 CAPLUS
 CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-methylphenyl)(4-oxo-4H-1,3-benzothiazin-2-yl)methylene]-, dimethyl ester (9CI) (CA INDEX NAME)

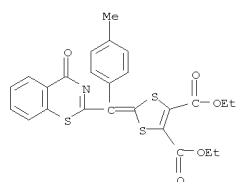


RN 78959-06-5 CAPLUS
 CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-chlorophenyl)(4-oxo-4H-1,3-benzothiazin-2-yl)methylene]-, dimethyl ester (9CI) (CA INDEX NAME)

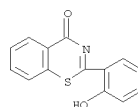


RN 78959-07-6 CAPLUS
 CN 1,3-Dithiole-4,5-dicarboxylic acid, 2-[(4-methylphenyl)(4-oxo-4H-1,3-benzothiazin-2-yl)methylene]-, diethyl ester (9CI) (CA INDEX NAME)

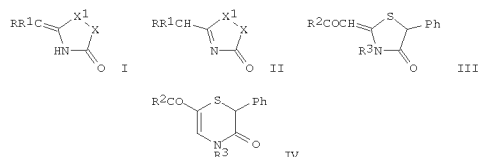
L4 ANSWER 28 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



L4 ANSWER 29 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1980:567097 CAPLUS
 DOCUMENT NUMBER: 93:167097
 ORIGINAL REFERENCE NO.: 93:26599a,26602a
 TITLE: Studies in organic mass spectrometry. I. Electron impact-induced fragmentation of 2-substituted 4H-1,3-benzothiazine-4-ones
 AUTHOR(S): Ceraulo, Leopoldo; Aguzzino, Pasquale; Ferrugia, Mirella; Giannola, Libero Italo
 CORPORATE SOURCE: Fac. Farm., Univ. Palermo, Palermo, I-90123, Italy
 SOURCE: Annali di Chimica (Rome, Italy) (1977), 67(9-12), 707-19
 CODEN: ANCRAL; ISSN: 0003-4592
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The mass spectra of eleven 2-substituted 2,3-dihydro-4H-1,3-benzothiazine-4-ones, five 2-substituted 4H-1,3-benzothiazine-4-ones, and two tetracyclic derivs. containing an imidazole and a thiazole ring are described. The fragmentation patterns have been studied by means of high resolution measurements, metastable ion detection, and D labeling.
 IT 75096-85-4
 RL: FRP (Properties) (mass spectrum of)
 RN 75096-85-4 CAPLUS
 CN 4H-1,3-Benzothiazine-4-one, 2-(2-hydroxyphenyl)- (CA INDEX NAME)

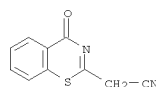


L4 ANSWER 30 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1978:509206 CAPLUS
 DOCUMENT NUMBER: 89:109206
 ORIGINAL REFERENCE NO.: 89:16821a,16824a
 TITLE: Heterocycles by reaction of mercapto- and hydroxycarboxylic esters with activated nitriles
 AUTHOR(S): Satzinger, Gerhard
 CORPORATE SOURCE: Forschungsinst., Goedecke A.-G., Freiburg/Br., Fed. Rep. Ger.
 SOURCE: Justus Liebig's Annalen der Chemie (1978), (3), 473-511
 CODEN: JLCBFF; ISSN: 0075-4617
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 OTHER SOURCE(S): CASREACT 89:109206
 GI

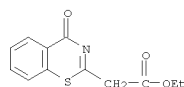


AB The title reaction of RR1CHCN (R = H, Ph; R1 = CO2Et, CN, Bz, Ph, pyridyl, indolyl, CONH2, etc.) with HSXCO2R2 (X = CH2, CHPh, CEt2, CH2CH2, o-C6H4; R2 = Me, Et), HOCHR3CO2R2 (R3 = H, Ph, p-tolyl, 2-furyl, 2-pyridyl; R2 = Et, Bu), and H2NCH2CO2Et gave heterocycles I (R = H, Ph; R1 = CO2Et, CN, Bz, etc.; X = CH2, CHPh, CEt2, o-C6H4, 2-furylmethylene, etc.; X1 = O, S, NH), which existed in equilibrium with II. These compds. were alkylated at the ring N in the form of I, usually with the fixation of Z-configuration; under more severe conditions, some were also alkylated at C-3. The ring of I, especially when X1 = S, was very stable; thus, I reacted with electrophiles at the 5- or α -position without ring cleavage. I (R = H, R1 = CN, X = o-C6H4, X1 = S) and its alkylation products were hydrolyzed to the resp. carboxylic acids or amides, e.g., I (R1 = CO2H, CONH2) without disturbing the heterocyclic ring. The alkylation products III (R2 = EtO, BuO, Ph; R3 = Me, Me2NCH2CH2, 2-piperidinoethyl) underwent ring expansion to IV upon prolonged contact with Et3N. Some I and their products are useful as choleretic, diuretic, antinymocotic, and central depressive agents (no data).
 IT 67433-02-7P 67433-03-8P 67433-04-9P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)
 RN 67433-02-7 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetonitrile, 4-oxo- (CA INDEX NAME)

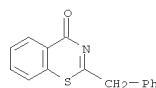
L4 ANSWER 30 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



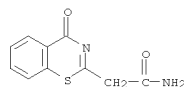
RN 67433-03-8 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetic acid, 4-oxo-, ethyl ester (CA INDEX NAME)



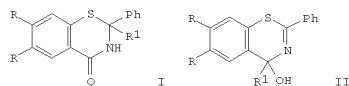
RN 67433-04-9 CAPLUS
 CN 4H-1,3-Benzothiazine-4-one, 2-(phenylmethyl)- (CA INDEX NAME)



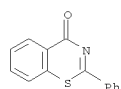
RN 67433-05-0 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetamide, 4-oxo- (CA INDEX NAME)



L4 ANSWER 31 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1976:421262 CAPLUS
 DOCUMENT NUMBER: 85:21262
 ORIGINAL REFERENCE NO.: 85:3473a,3476a
 TITLE: Synthesis of 2,2- and 2,4-substituted
 1,3-benzthiazines
 AUTHOR(S): Szabo, J.; Varga, I.
 CORPORATE SOURCE: Dep. Pharm. Chem., Med. Univ., Szeged, Hung.
 SOURCE: Acta Chimica Academiae Scientiarum Hungaricae (1976),
 88(1), 61-6
 CODEN: ACASA2; ISSN: 0001-5407
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 85:21262
 GI

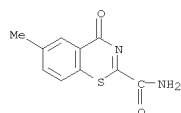


AB Alkylbenzothiazinones (I, R = H, R1 = Et, PhCH2; R = MeO, R1 = Et, Bu,
 PhCH2) were obtained in 19.5-38.2% yields by alkylation of the
 corresponding benzothiazinone with R1MgX (X = halo). Analogously
 obtained
 were 38.2-48.5% II (R = H, MeO, R1 = Ph).
 IT 7474-08-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (alkylation of, by ethylmagnesium bromide)
 RN 7474-08-0 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)

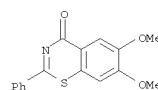


IT 56755-15-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and alkylation of)
 RN 56755-15-8 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 6,7-dimethoxy-2-phenyl- (CA INDEX NAME)

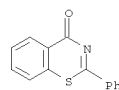
L4 ANSWER 32 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1976:4880 CAPLUS
 DOCUMENT NUMBER: 84:4880
 ORIGINAL REFERENCE NO.: 84:825a,828a
 TITLE: Cyanogen-2-mercaptobenzoic acid condensations. Route
 to bis-1,3-benzothiazin-4-ones
 AUTHOR(S): Heindel, Ned D.; Schaeffer, Lee A.
 CORPORATE SOURCE: Cent. Health Sci., Lehigh Univ., Bethlehem, PA, USA
 SOURCE: Journal of Heterocyclic Chemistry (1975), 12(4),
 783-4
 CODEN: JHTCAD; ISSN: 0022-152X
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI For diagram(s), see printed CA Issue.
 AB The bisbenzothiazinones I (R = R1 = H, Cl; R = Cl, Me, R1 = H) were
 prepared
 (21-95%) by treating 2,3,5-(HS)R1RC6H2CO2H with NCCN.
 IT 57446-11-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 57446-11-4 CAPLUS
 CN 4H-1,3-Benzothiazine-2-carboxamide, 6-methyl-4-oxo- (CA INDEX NAME)



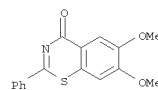
L4 ANSWER 31 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



L4 ANSWER 33 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1975:547442 CAPLUS
 DOCUMENT NUMBER: 83:147442
 ORIGINAL REFERENCE NO.: 83:23163a,23166a
 TITLE: Reaction of 4H-1,3-benzothiazin-4-ones with Grignard
 reagents
 AUTHOR(S): Varga, Istvan; Szabo, Janos; Sohar, Pal
 CORPORATE SOURCE: Pharm.-Chem. Inst., Med. Univ. Szeged, Szeged, Hung.
 SOURCE: Chemische Berichte (1975), 108(8), 2523-30
 CODEN: CHBEAM; ISSN: 0009-2940
 DOCUMENT TYPE: Journal
 LANGUAGE: German
 OTHER SOURCE(S): CASREACT 83:147442
 GI For diagram(s), see printed CA Issue.
 AB Benzothiazinone I reacted with Grignard reagents R1MgBr to give
 dihydrobenzothiazinones II (R = H, R1 = Et, CH2Ph; R = MeO, R1 = Et, Bu,
 CH2Ph) and benzothiazinols III (R = H, MeO; R1 = Ph). PhCH2MgBr gave, in
 addition to II (R = MeO, R1 = CH2Ph), benzyldenebenzothiazine IV,
 probably
 formed via intermediate III (R = MeO, R1 = CH2Ph).
 IT 7474-08-0
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with Grignard reagent)
 RN 7474-08-0 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)

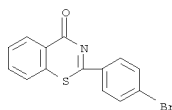


IT 56755-15-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction with Grignard reagents)
 RN 56755-15-8 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 6,7-dimethoxy-2-phenyl- (CA INDEX NAME)

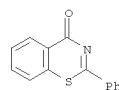


L4 ANSWER 34 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1969:491408 CAPLUS
DOCUMENT NUMBER: 71:91408
ORIGINAL REFERENCE NO.: 71:17019a,17022a
TITLE: Synthesis and study of 1,3-benzothiazines. II.
Chemical study of the compounds obtained
AUTHOR(S): Bourgoin-Legay, Daniele; Boudet, Roger
CORPORATE SOURCE: Lab. Chim. Org., Fac. Sci. Dakar, Dakar, Senegal
SOURCE: Bulletin de la Societe Chimique de France (1969),
(7),
2524-30
CODEN: BSCFAS; ISSN: 0037-8968
DOCUMENT TYPE: Journal
LANGUAGE: French
OTHER SOURCE(S): CASREACT 71:91408
AB Treatment of 2-alkyl-4H-1,3-benzothiazines (I) with air or H₂O₂ results
in
preferential oxidation of the S atom, rather than of the 4-CH₂ group.
Although the corresponding 2-aryl compds. are resistant to air oxidation,
careful treatment with KMnO₄ in Me₂CO solution leads to either S
oxidation or
4-CH₂ oxidation, or to oxidation at both positions, depending on exact
conditions. Reaction of I with AgNO₃ and alkylation with MeI results in
exclusive substitution at the 4-position. A number of other oxidation,
substitution, and addition reactions are described. Refluxing 0.7 g.
2-methyl-4H-1,3-benzothiazine (II) in 20 ml. concentrated HCl 24 hrs. and
basification gave 0.3 unchanged II, but further treatment of the alkaline
filtrate with BrCl yielded 50% N,S-dibenzoyl derivative of
2-mercaptobenzylamine. Heating 2 g. 2-phenyl-4H-1,3-benzothiazine (III)
in 20 ml. 50% H₂SO₄ 6 hrs. gave SO₂, 0.4 g. PhCO₂H, and 0.5 g.
benzisothiazole. Upon being exposed to air 2 months., 1 g. II afforded
approx. 0.5 g. 2-methyl-1-oxo-4H-1,3-benzothiazine (IV), m. 158°
(EtOH). Similarly prepared were 2-ethyl-1-oxo-4H-1,3-benzothiazine (V),
m.
137-8° (EtOH), and 2-isopropyl-1-oxo-4H-1,3-benzothiazine, m.
179-80° (H₂O-EtOH). Treatment of 1 g. II in 40 ml. AcOH with 40
ml. dilute H₂O₂ 4.5 hrs. afforded 64% IV. Under these conditions, V was
obtained in 72% yield, but 2-(p-anisyl)-4H-1,3-benzothiazine (VI)
remained
unaffected. A solution of 4.5 g. III in 270 ml. Me₂CO was stirred with
10.2 g. KMnO₄ 4 hrs., kept another 12 hrs., filtered, evaporated, and the
residue
extracted with PrOH to give 4-oxo-2-phenyl-1,3-benzothiazine (VII), m.
122.5-3°. Reaction of 1 g. III with 2 g. KMnO₄ in 60 ml. Me₂CO 3
hrs., addition of 20 ml. concentrated HCl and dilution with 200 ml. H₂O
afforded 0.3
g. 2,3-dihydro-1,4-dioxo-2-phenyl-1,3-benzothiazine (vIII), m.
203-4°, and 0.1 g. mixture containing VII and vIII. Stirring a mixture
of
1 g. 2,3-dihydro-4-oxo-2-phenyl-1,3-benzothiazine and 1 g. KMnO₄ in 30
ml.
Me₂CO at room temperature 24 hrs., heating on a steam bath 1 hr., and
addition of
10 ml. concentrated HCl and 150 ml. H₂O yielded 0.3 g. vIII. Starting
from VI,

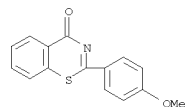
L4 ANSWER 34 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



L4 ANSWER 34 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
2-(p-anisyl)-4-oxo-1,3-benzothiazine, m. 178.5-9.5° (PrOH), and
2-(p-anisyl)-2,3-dihydro-1,4-dioxo-1,3-benzothiazine, m. 221°
(PhCO₂Et), were prepd. via similar procedures. Likewise, oxidn. of
2-(p-bromophenyl)-4H-1,3-benzothiazine (IX) led to
2-(p-bromophenyl)-4-oxo-
1,3-benzothiazine, m. 157.5-8° (PrOH), and 2-(p-bromophenyl)-2,3-
dihydro-1,4-dioxo-1,3-benzothiazine, m. 207° (PhCO₂Et). Under
these conditions, II yielded only tar. A soln. of 1 g.
2-ethyl-4H-1,3-benzothiazine in 10 ml. EtOH was treated with 3 g. AgNO₃
in
5 ml. H₂O and 20 ml. EtOH, the insol. Ag salt salt added to a soln. of 1
ml. MeI in 30 ml. PhMe, and the mixt. stirred at room temp. 1 hr. and at
50° 2.5 hrs. to give 0.64 g. 2-ethyl-4-methyl-1,3-benzothiazine, m.
80-1° (C₆H₆-petr. ether). Similar reaction of IV furnished an
unstable Ag salt which was treated directly with MeI in EtOH at room
temp.
to give 2,4-dimethyl-1-oxo-1,3-benzothiazine, m. 102° (CCl₄).
Dropwise addn. of 6 ml. 20% Br in CCl₄ to 1 g. III in 30 ml. CHCl₃ gave
1.3 g. red solid, Cl₄H₁₁Br₂NS, m. 145°. Treatment of this compd.
with hot PrOH gave VII. Brominations were likewise studied with VI, IX,
and 2-(p-nitrophenyl)-4H-1,3-benzothiazine, but complex mixts. of
products
were obtained.
IT 7474-08-0P 23574-20-1P 23574-21-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 7474-08-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)

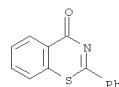


RN 23574-20-1 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(p-methoxyphenyl)- (8CI) (CA INDEX NAME)



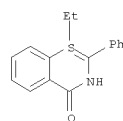
RN 23574-21-2 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(p-bromophenyl)- (8CI) (CA INDEX NAME)

L4 ANSWER 35 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1967:443770 CAPLUS
DOCUMENT NUMBER: 67:43770
ORIGINAL REFERENCE NO.: 67:8227a,8230a
TITLE: Lithium aluminum hydride hydrogenation test on a
1,3-benzothiazine
AUTHOR(S): Bourgoin-Legay, Daniele; Boudet, Roger
CORPORATE SOURCE: Univ. Dakar, Dakar, French West Africa
SOURCE: Comptes Rendus des Seances de l'Academie des
Sciences,
Serie C: Sciences Chimiques (1967), 264(15), 1304-6
CODEN: CHDCAQ; ISSN: 0567-6541
DOCUMENT TYPE: Journal
LANGUAGE: French
GI For diagram(s), see printed CA Issue.
AB The reduction of 2-phenyl-4-oxo-1,3-benzothiazine (I) with LiAlH₄ led,
unexpectedly, to 3 products: 2-mercaptobenzylamine (Ia), benzisothiazole
(II), and benzyl alc. These provided an interesting confirmation of the
initial structure. I (9.6 g.) was treated with 2.5 g. LiAlH₄ in 50 ml.
anhydrous ether. The mixture was extracted 6 hrs., heated 5 hrs.,
cooled, 10 ml.
EtOAc added carefully, and then 70 ml. 1:1 HCl-H₂O added. The aqueous
phase
was made alkaline, and approx. 1 g. benzisothiazole was obtained.
Excess BrCl
(15 ml.) was added to the aqueous solution to yield 10 g. precipitate,
m. 141°,
identical with the N,S-dibenzoylated derivative of Ia (CA 64: 15782e).
Evaporation
of the solvent from the ether phase and distillation of the residue
yielded 3.8
g. benzyl alc.
IT 7474-08-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(reduction of, with lithium tetrahydroaluminate)
RN 7474-08-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)

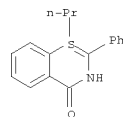


L4 ANSWER 36 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1962:475956 CAPLUS
 DOCUMENT NUMBER: 57:75956
 ORIGINAL REFERENCE NO.: 57:15105c-g
 TITLE: Synthesis and biological activity of some 4-(substituted-amino)pyrimidines
 AUTHOR(S): Segal, Hayim; Hedgcoth, Charles; Skinner, Charles G.
 CORPORATE SOURCE: Univ. of Texas, Austin
 SOURCE: Journal of Medicinal & Pharmaceutical Chemistry (1962), 5, 871-6
 CODEN: JUPCAS; ISSN: 0095-9065
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 AB A series of 13 4-(substituted-amino)pyrimidines were prepared and tested for their effect on the rate of seed germination. None of the compds. enhance the rate of germination and all were relatively non-toxic to the seed. From these results as well as earlier tests it appears that the purine nucleus is essential for producing analogs with kinetin-like activity. A mixture of 2.88 g. 2,4-dimercaptopyrimidine and 4.38 g. BuNH₂ was refluxed 5 hrs., cooled, 50 ml. H₂O added, and the precipitate re-crystallized from MeOH to give 3.2 g. 4-butylamino-2-pyrimidinethiol, m. 212-14° (decomposition). Prepared similarly were: 4-isopentylamino-2-pyrimidinethiol, m. 198-9° (decomposition); 4-n-hexylamino-2-pyrimidinethiol, m. 200-4° (decomposition); and 4-n-heptylamino-2-pyrimidinethiol, m. 179-80° (decomposition). 4-n-Pentylamino-2-pyrimidinethiol (5.9 g.), 2.83 g. chloroacetic acid, and 35 ml. H₂O was heated 1 hr., cooled, evaporated to dryness in vacuo, and the residue recrystd. from MeOH-Me₂CO-dioxane to give 4 g. 2-carboxymethylthio-4-n-pentylaminopyrimidine-HCl, m. 143-5° (decomposition). 2-Carboxymethylthio-4-n-pentylaminopyrimidine-HCl (1.28 g.) and 20 ml. concentrated HCl was refluxed 4 hrs., cooled, the pH adjusted to 7 with NH₄OH, and the precipitate recrystd. from H₂O to give 0.7 g. 4-n-pentylamino-2-pyrimidinol, m. 105-7° (decomposition). 4-n-Hexylamino-2-pyrimidinethiol (3.17 g.), 1.59 g. Na₂CO₃, and 12 g. Raney Ni in 100 ml. EtOH was refluxed 24 hrs., filtered while hot, 12 g. Raney Ni added, refluxed 8 hrs., filtered, the filtrate evaporated to dryness in vacuo, and the residue crystallized from hexane-C₆H₆ to give 0.8 g. 4-n-hexylaminopyrimidine, m. 61-3°. Prepared similarly were: 4-n-heptylamino-2-pyrimidinethiol, m. 147-52° (decomposition); 4-benzylaminopyrimidine, m. 105-7°, and 4-(2-tetrahydrofurfurylamino)pyrimidine-HCl, m. 155-7°.
 IT 97554-98-8P, 1H-1,3-Benzothiazin-4(3H)-one, 1-ethyl-2-phenyl-98681-46-0P, 1H-1,3-Benzothiazin-4(3H)-one, 2-phenyl-1-propyl-RL: PREP (Preparation)
 RN 97554-98-8 CAPLUS
 CN 1H-1,3-Benzothiazin-4(3H)-one, 1-ethyl-2-phenyl- (7CI) (CA INDEX NAME)

L4 ANSWER 36 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

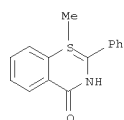
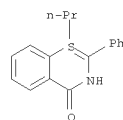


RN 98681-46-0 CAPLUS
 CN 1H-1,3-Benzothiazin-4(3H)-one, 2-phenyl-1-propyl- (7CI) (CA INDEX NAME)

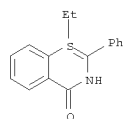


L4 ANSWER 37 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1962:475955 CAPLUS
 DOCUMENT NUMBER: 57:75955
 ORIGINAL REFERENCE NO.: 57:15105a-c
 TITLE: Unexpected reaction of alkyl halides with silver derivative of a benzothiazine
 AUTHOR(S): Boudet, Roger
 CORPORATE SOURCE: Univ. Dakar, W. Africa
 SOURCE: Compt. Rend. (1962), 255, 533-5
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 GI For diagram(s), see printed CA Issue.
 AB In 2.4 g. 2-phenyl-4,5-benzothiazinone and 80 ml. boiling EtOH was dissolved 2 g. AgNO₃ and the mixture cooled to precipitate 3.5 g. I, pale yellow, decomposed at 80°. I, 2 g. MeI, and 50 ml. PhMe stirred 2 hrs. at 50°, the mixture filtered, the filtrate evaporated, and the residue crystallized from EtOH gave 1.5-2 g. 1-methyl derivative (II) of I, m. 81°. Hydrolysis of II in boiling H₂O gave PhCHO and 2-MeSC₆H₄CONH₂ (III). Homologs of II made were 1-Et, m. 55°, and 1-Pr, m. 50°. Corresponding homologs of III were 2-EtS, m. 131-2°, and 2-PrS, m. 123.5°, which was further hydrolyzed to 2-PrSC₆H₄CO₂H, m. 121.5-2.5°.
 IT 97283-55-1P, 1H-1,3-Benzothiazin-4(3H)-one, 1-methyl-2-phenyl-97554-98-8P, 1H-1,3-Benzothiazin-4(3H)-one, 1-ethyl-2-phenyl-98681-46-0P, 1H-1,3-Benzothiazin-4(3H)-one, 2-phenyl-1-propyl-RL: PREP (Preparation)
 RN 97283-55-1 CAPLUS
 CN 1H-1,3-Benzothiazin-4(3H)-one, 1-methyl-2-phenyl- (7CI) (CA INDEX NAME)

L4 ANSWER 37 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 97554-98-8 CAPLUS
 CN 1H-1,3-Benzothiazin-4(3H)-one, 1-ethyl-2-phenyl- (7CI) (CA INDEX NAME)



RN 98681-46-0 CAPLUS
 CN 1H-1,3-Benzothiazin-4(3H)-one, 2-phenyl-1-propyl- (7CI) (CA INDEX NAME)

L4 ANSWER 38 OF 45 CAPLUS COPYRIGHT 2008 ACS ON STN
 ACCESSION NUMBER: 1961:27911 CAPLUS
 DOCUMENT NUMBER: 55:27911
 ORIGINAL REFERENCE NO.: 55:5509b-1,5510a-d
 TITLE: Arylbenzo[e]-1,3-thiazine derivatives. III.
 Verification of the position of the alkoxy groups in
 arylbenzo[e]-1,3-thiazine derivatives by synthesis
 Szabo, J.; Vinkler, E.
 AUTHOR(S):
 CORPORATE SOURCE: Med. Univ., Szeged, Hung.
 SOURCE: Acta Chimica Academiae Scientiarum Hungaricae (1958),
 17, 201-9
 CODEN: ACAS2A; ISSN: 0001-5407
 DOCUMENT TYPE: Journal
 LANGUAGE: German

AB cf. CA 52, 6358c. The position of alkoxy groups in several
 dialkoxybenzo[e]-1,3-thiazine derivs. was verified by oxidation of the
 benzothiazine bases to 4-oxo derivs., and comparison of these with the
 same products obtained from S-arylothiosalicylamides, the alkoxy
 positions

of which were known. The S-arylothiosalicylamide derivs., which were
 prepared from 6,7-dialkoxy derivs. obtained from 6,3,4-H₂N(MeO)2C₆H₂CO₂H,
 were cyclized to 4-oxo derivs. according to Bohme and Schmidt (cf. CA 49,
 15907a). Thus, 2.85 g. 2-phenyl-6,7-dimethoxybenzo[e]-1,3-thiazine in 10
 ml. HOAc treated with 1.35 g. CrO₃ in 1 ml. H₂O and 2 ml. HOAc gave after
 10 min. 0.8 g. 2-phenyl-4-oxo-6,7-dimethoxybenzo[e]-1,3-thiazine (I),
 yellow needles, m. 189-90° (alc.). Similarly prepared were: from
 0.86 g. 2-(3,4-dimethoxyphenyl)-6,7-dimethoxybenzo[e]-1,3-thiazine, 0.25
 g. 2-(3,4-dimethoxyphenyl)-4-oxo-6,7-dimethoxybenzo[e]-1,3-thiazine (II),
 yellow needles, m. 217-18° (alc.); from 1.73 g.
 2-phenyl-6,7-diethoxybenzo[e]-1,3-thiazine, 0.52 g. 2-phenyl-4-oxo-6,7-
 diethoxybenzo[e]-1,3-thiazine (III), yellow needles, m. 154-5°
 (alc.). 6,3,4-H₂N(MeO)2C₆H₂CO₂H (9.6 g.) in 100 ml. H₂O and 10 ml.

concentrated
 HCl added at 0° to 3.45 g. NaNO₂ in 15 ml. H₂O, the mixture stirred 1
 hr. at 0°, added with stirring to a solution prepared from 13 g. Na₂S,
 15 ml. H₂O, and 1.73 g. S, treated with 2.11 g. NaOH in 100 ml. H₂O and
 with 50 g. crushed ice, the mixture stirred 3 hrs. until N evolution
 ceased,

acidified with HCl, the precipitate filtered off, washed with H₂O,
 dissolved in

dilute NaHCO₃, treated with C, precipitated with concentrated HCl,
 filtered, washed with

H₂O, suspended in 50 ml. HOAc, 2 g. Zn added, the mixture refluxed 3
 hrs.,

cooled, centrifuged, the precipitate heated 15 min. with 10 g. NaOH in
 50 ml.

H₂O, filtered, the solution acidified with HCl, and the precipitate
 filtered off,

washed with H₂O, and dried gave 4.6 g. 4,5-dimethoxythiosalicylic acid
 (IV), needles, m. 184-5° (alc.). IV (4.3 g.) in 25 ml. alc.

treated with a saturated alc. iodine solution until just colored brown,
 H₂O

added, the precipitate formed filtered off, washed with 50% alc., and
 dried at

105° gave 3.95 g. 4,4',5,5'-tetramethoxydiphenyl

L4 ANSWER 38 OF 45 CAPLUS COPYRIGHT 2008 ACS ON STN (Continued)
 the prepn. of IX gave 2.14 g. S-benzoyl-4,5-diethoxythiosalicylamide

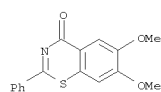
(XX),

needles, m. 179-80° (alc.). XX (1.73 g.) treated as in the prepn.
 of I gave 0.9 g. III, m. 154-5° (alc.).

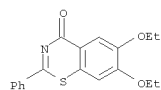
IT 56755-15-8P, 4H-1,3-Benzothiazin-4-one, 6,7-dimethoxy-2-phenyl-
 101734-42-3P, 4H-1,3-Benzothiazin-4-one, 6,7-diethoxy-2-phenyl-
 101734-79-6P, 4H-1,3-Benzothiazin-4-one, 2-(3,4-dimethoxyphenyl)-
 6,7-dimethoxy-

RL: PREP (Preparation)
 (preparation of)

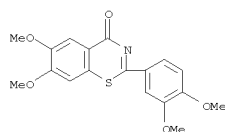
RN 56755-15-8 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 6,7-dimethoxy-2-phenyl- (CA INDEX NAME)



RN 101734-42-3 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 6,7-diethoxy-2-phenyl- (CA INDEX NAME)



RN 101734-79-6 CAPLUS
 CN 4H-1,3-Benzothiazin-4-one, 2-(3,4-dimethoxyphenyl)-6,7-dimethoxy- (CA INDEX NAME)



L4 ANSWER 38 OF 45 CAPLUS COPYRIGHT 2008 ACS ON STN (Continued)
 disulfide-2,2'-dicarboxylic acid (V), needles, m. 248-50° (alc.).
 V (8.52 g.) dissolved on the H₂O bath in a soln. of 4 g. KHC0₃ in 30 ml.
 H₂O, evapd. to dryness at 105°, the residue pulverized, suspended
 in 50 ml. C₆H₆, gradually treated with 10 g. SOC1₂, refluxed 30 min., the
 solvent and SOC1₂ distd. in vacuo, the mixt. cooled, and the crystals
 formed washed with 15-20 ml. petr. ether gave 7.2 g. 4,4',5,5'-
 tetramethoxydiphenyl disulfide-2,2'-dicarbonyl chloride (VI), yellow
 needles, m. 147-8° (C₆H₆). VI (6.95 g.) treated in 60 ml. C₆H₆
 satd. with dry NH₃, gave 5.2 g. 4,4',5,5'-tetramethoxydiphenyl
 disulfide-2,2'-dicarboxamide (VII), needles, m. 221-3° (alc.). VII
 (4.24 g.) in 20 ml. HOAc treated with 1 g. Zn powder, and the mixt.
 refluxed 1 hr. gave 2.55 g. 4,5-dimethoxythiosalicylamide (VIII), yellow
 needles, m. 169-70° (alc.). VIII (2.13 g.) in 8 ml. abs. C₅H₅N
 gradually treated with 1.4 g. BzCl, stirred 30 min., poured into dil.
 H₂SO₄ and crushed ice, the product filtered off, washed with H₂O, and
 dried gave 2.3 g. S-benzoyl-4,5-dimethoxythiosalicylamide (IX), needles,
 m. 179-80° (alc.). Two-thirds of a soln. of 1.59 g. IX in 20 ml.
 abs. xylene distd. with slow introduction of dry HCl, the remainder of

the
 solvent distd. in vacuo after shutting off the HCl, the residue dissolved
 in C₆H₆, washed with N NaOH and H₂O, dried, the solvent distd., and the
 residue crystd. from alc. gave 0.8 g. I, m. 189-90°. VIII (1.07
 g.) treated with 3,4-(MeO)2C₆H₃COCl as in the prepn. of IX gave 1.3 g.
 S-veratroyl-4,5-dimethoxythiosalicylamide (X), needles, m. 178-9°
 (alc.). X (0.95 g.) treated as in the prepn. of I gave 0.4 g. II, m.
 217-18° (alc.). o-C₆H₄(OEt)₂ (41.5 g.) and 45 g. PhNMeCHO in 51
 g. POCl₃ refluxed 90 min. on a H₂O bath, the mixt. poured into 50 ml.

H₂O,
 extd. with 200 ml. Et₂O, washed with H₂O, shaken 3 hrs. with 40 g. NaHSO₃
 in 120 ml. H₂O, the aq. phase sepd., treated with solid Na₂CO₃, the freed
 aldehyde extd. with Et₂O, the Et₂O layer washed with H₂O, dried, the
 solvent distd., and the residue distd. in vacuo gave 26.6 g.
 3,4-(EtO)2C₆H₃CHO (XI), b₈ 139-40°, n_D1.557, d₂₀1.101. XI
 (38.8 g.) nitrated with 60.5 g. concd. HNO₃ gave 43 g.

6,3,4-O₂N(EtO)2C₆H₂CHO (XII), yellow needles, m. 95-6° (alc.). XII
 (23.9 g.) and 12 g. NaOH in 200 ml. H₂O warmed on the H₂O bath, gradually
 treated with 80 g. K₂MO₄ in 600 ml. H₂O until decolorization of the
 permanganate took place, the soln. filtered hot and acidified with concd.

HCl gave 12.1 g. 6,3,4-O₂N(EtO)2C₆H₂CO₂H (XIII), needles, m. 142-3°
 (C₆H₆). XIII (11.95 g.) in 250 ml. alc. hydrogenated at 50° and
 atm. pressure with 0.05 g. Pd-C gave 10.1 g. 6,3,4-H₂N(EtO)2C₆H₂CO₂H
 (XIV), prisms, m. 135-6° (decompn.) (alc.). XIV (9 g.) treated as

in the prepn. of IV gave 4 g. 4,5-diethoxythiosalicylic acid (XV),
 needles, m. 202-3° (alc.). XV (3.63 g.) treated as in the prepn.
 of V gave 3.1 g. 4,4',5,5'-tetraethoxydiphenyl

disulfide-2,2'-dicarboxylic
 acid (XVI), needles, m. 239-40° (alc.). XVI (9.25 g.) treated as

in the prepn. of VI gave 7.4 g. 4,4',5,5'-tetraethoxydiphenyl
 disulfide-2,2'-dicarbonyl chloride (XVII), yellow needles, m.

106-9° (C₆H₆ and petr. ether). XVII (5.19 g.) treated as in the
 prepn. of VII gave 4 g. 4,4',5,5'-tetraethoxydiphenyl disulfide-2,2'-
 dicarboxamide (XVIII), needles, m. 219-20° (C₆H₆). XVIII (3.61 g.)

treated as in the prepn. of VIII gave 2.5 g. 4,5-diethoxythiosalicylamide
 (XIX), platelets, m. 160-1° (alc.). XIX (2.41 g.) treated as in

L4 ANSWER 39 OF 45 CAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 1960:118326 CAPLUS

DOCUMENT NUMBER: 54:118326

ORIGINAL REFERENCE NO.: 54:22656h-1,22657a-b
 Studies on thiazine: oxobenzo-m-thiazine and some of
 its 2-(alkylaminomethyl) derivatives

AUTHOR(S):
 CONTI, L.; SPINELLI, D.

CORPORATE SOURCE:
 Univ. Bari, Italy

SOURCE:
 Bollettino Scientifico della Facolta di Chimica
 Industriale di Bologna (1959), 18, 29-33

CODEN: BSFCAY; ISSN: 0366-3205

DOCUMENT TYPE:
 Journal

LANGUAGE:
 Unavailable

AB cf. Conti and Leandri, CA 51, 5765c; 51, 17926a; 51, 17927g. New
 thiazine

derivs. of potential pharmacol. interest were prepared in view of earlier
 and related work. 4-Oxobenzo-m-thiazine-2-carboxylic acid (I), m.

107° (EtOH), was prepared by adding 3.3 g. freshly distilled EtO₂CCN to
 4.5 g. thiosalicylic acid in 20 ml. anhydrous dioxane, cooling the
 mixture on

ice and salt, passing in a stream of dry HCl 3 hrs., allowing the
 mixture to

stand overnight at 0°, filtering, neutralizing the aqueous suspension
 of the precipitate with NaHCO₃ over ice, and working up the solid

precipitate (6 g.
 crude). 4-Oxobenzo-m-thiazine (II), C₈H₅NOS, sweetish taste, m.

138° (H₂O), was prepared by boiling 1 g. I in 100 ml. H₂O to solution
 and taking to near dryness. Et ester of 4-oxobenzo-m-thiazine-2-acetic
 acid, needles, m. 172° (EtOH and dioxane), was prepared analogously

from 3 g. thiosalicylic acid and 2.4 g. EtO₂CCH₂CN in 20 ml. dioxane in
 2.5-g. yield. 2-Chloromethyl-4-oxobenzo-m-thiazine, (III), m. 115°
 (benzene and a little absolute alc.), was similarly prepared in 3.1-g.

yield
 from 3.3 g. thiosalicylic acid and 1.62 g. ClCH₂CN in 25 ml. anhydrous
 dioxane; it was not stable in air. 2-Morpholinomethyl derivative of II,

m.

157° (C₆H₆), 2-piperidinomethyl derivative of II, needles, m.

149° (C₆H₆), 2-diethylaminomethyl derivative of II, platelets, m.

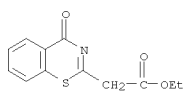
160° (alc.-C₆H₆), and 2-cyclohexylaminomethyl derivative of II,
 needles, m. 185° (C₆H₆ and petr. ether), were prepared by refluxing 1
 mole III and 2.5 moles of the resp. amine in C₆H₆ and working up the

products.
 IT 67433-03-8P, 4H-1,3-Benzothiazine-2-acetic acid, 4-oxo-, ethyl
 ester 98591-85-6P, 4H-1,3-Benzothiazine-2-carboxylic acid,
 4-oxo- 98592-32-6P, 4H-1,3-Benzothiazin-4-one, 2-(chloromethyl)-
 100615-33-6P, 4H-1,3-Benzothiazin-4-one, 2-(diethylaminomethyl)-
 100795-37-7P, 4H-1,3-Benzothiazin-4-one, 2-morpholinomethyl-
 100957-60-6P, 4H-1,3-Benzothiazin-4-one, 2-(cyclohexylaminomethyl)-
 101938-35-6P, 4H-1,3-Benzothiazin-4-one, 2-piperidinomethyl-

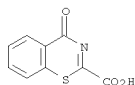
RL: PREP (Preparation)
 (preparation of)

RN 67433-03-8 CAPLUS
 CN 4H-1,3-Benzothiazine-2-acetic acid, 4-oxo-, ethyl ester (CA INDEX NAME)

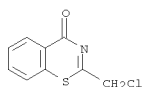
L4 ANSWER 39 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



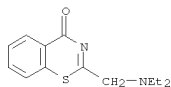
RN 98591-85-6 CAPLUS
CN 4H-1,3-Benzothiazine-2-carboxylic acid, 4-oxo- (CA INDEX NAME)



RN 98592-32-6 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(chloromethyl)- (CA INDEX NAME)

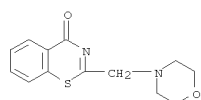


RN 100615-33-6 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(diethylaminomethyl)- (6CI) (CA INDEX NAME)

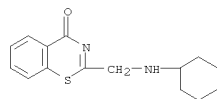


RN 100795-37-7 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-morpholinomethyl- (6CI) (CA INDEX NAME)

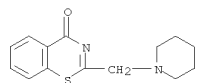
L4 ANSWER 39 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 100957-60-6 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(cyclohexylaminomethyl)- (6CI) (CA INDEX NAME)



RN 101938-35-6 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-piperidinomethyl- (6CI) (CA INDEX NAME)



L4 ANSWER 40 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1960:97610 CAPLUS
DOCUMENT NUMBER: 54:97610
ORIGINAL REFERENCE NO.: 54:18530f-1,18531a-b
TITLE: Sulfuration of organic compounds. XIX. Synthesis of 3,1-benzothiazine-4-thiones and corresponding oxygenated compounds
AUTHOR(S): Legrand, Louis
CORPORATE SOURCE: Fac. sci., Caen
SOURCE: Bulletin de la Societe Chimique de France (1960) 337-43
CODEN: BSCFAS; ISSN: 0037-8968
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB ef. CA 54, 13103b. o-RCOHC6H4CO2R' (I) (from RCOCl and o-H2CC6H4CO2R', except when R' = H) (20 g.), refluxed 1 hr. with 40 g. P2S5 in 500 cc. xylene, the solution cooled, brought to 1 l. with C6H6, filtered, the filtrate washed with cold 5% KOH and with H2O, HgCl2 in Me2CO added, the addition compound filtered, washed with Et2O, and decomposed with aqueous Na2S, or, if the addition compound is soluble, the solvent evaporated, gives 2-R-3,1-benzothiazine-4-thione (II), red or orange crystals. To 1 g. II in 150 cc. boiling Me2CO is added powdered KMnO4 to give a quant. yield of 2-R-3,1-benzothiazin-4-one (III) [when R = aryl, 1 g. II in 50 cc. boiling AcOH is oxidized to 90-5% III by 2 g. Hg(OAc)2]. R, R', m.p. of I, yield of II, m.p. of II, and m.p. of III are: H, H, 168°, 5, 114°, 122°; Me, H, 185°, 6 (Me, Me 8%), 99°, 93°; Et, Me, 34° (bl 140°), 15, 63°, -; iso-Pr, Me, 49-5°, (bl 136°), 19, 91°, -; tert-Bu, Me, 46-7° (bl 128-30°), 80, 80°, -; PhCH2, Me, 45° (bl 200-3°), 30, 148°, 90°, Ph, H, 181°, 8 (Ph, Me 35%; Ph, Et 33%), 128°, 116°; 2-MeC6H4, Me, 98°, 32, 116°, Et, 103°; 4-MeC6H4, Me, 114°, 35, 160°, 130°; 4-MeOC6H4, Et, 114.5°, 37, 144°, 173°; 2-ClC6H4, Et, 115°, 43, 145°, 138°; 4-ClC6H4, Me, 138°, 38, 215°, 208°; 2-BrC6H4, Me, 86-7°, 35, 130°, 131°; 3-BrC6H4, Me, 83°, 39, 187°, 123°; 4-BrC6H4, Et, 123°, 34, 211°, 199°; 2-ONC6H4, Me, 158°, 50, 147°, 189°, 3-ONC6H4, Et, 127°, 29, 184°, 166.5°; 1-C10H7, Me, 120°, 50, 171.5°, 156°; 2-C10H7, 129°, 50, 157.5°, 157°. Similarly, 2,5-(RCOHC6H4CO2Me (IV) gives 2-R-6-chloro-3,1-benzothiazine-4-thione (V) and 2-R-6-chloro-3,1-benzothiazine-4-one (VI). R, m.p. of IV, yield of V, m.p. of V, and m.p. of VI are: H, -, 3, 141.5°, -; Me, 130°, 12, 141°, 121°; Ph, 140°, 30, 143°, 176°; 2-ClC6H4, -, 30, 178°, 146°; 4-ClC6H4, 201°, 40, 247°, 236°. To II in boiling alc. is added a 10% solution of KOH until the color changes to yellow.

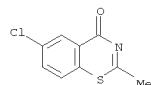
The solution is concentrated and AcOH added to give crystals of unstable o-RCOHC6H4COSH, which, heated at 120-60°, gives approx. 80% (from II) 2-R-3,1-benzoxazin-4-one (VII). R and m.p. of VII are: Ph, 123°; 2-MeC6H4, 116°; 4-MeC6H4, 156°; 2-ClC6H4, 136°; 4-ClC6H4, 189°; 2-BrC5H4, 120.5°; 3-BrC5H4, 159°; 2-C10H7, 206.5°. Similarly, V gives the following 2-R-6-chloro-3,1-benzoxazin-4-ones (R and m.p. shown): Ph, 196°;

L4 ANSWER 40 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

4-ClC6H4, 194°. II (R = Ph) (VIII) with H2O2 and K in alc.-H2O gives o-PhCONHC6H4CO2H. VIII is formed from III (R = Ph) or VII (R = Ph) heated with P2S5 in xylene.

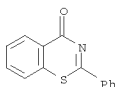
IT 98592-33-7 (Derived from data in the 6th Collective Formula Index (1957-1961))

RN 98592-33-7 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6-chloro-2-methyl- (CA INDEX NAME)

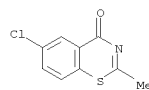


L4 ANSWER 41 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1960:97609 CAPLUS
DOCUMENT NUMBER: 54:97609
ORIGINAL REFERENCE NO.: 54:18529g-1,18530a-f
TITLE: Chlorination and bromination of cyclic acetals
AUTHOR(S): Cort, L. A.; Pearson, Ronald G.
CORPORATE SOURCE: Battersea Coll. Technol., London
SOURCE: Journal of the Chemical Society (1960) 1682-7
CODEN: JCSOA9; ISSN: 0368-1769
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 54:97609
AB Cl was fed into 55 g. molten trans-1,4,5,8-tetraoxadecahydronaphthalene (I), prepared according to Contardi and Ercoli (CA 31, 17644 in the presence of a crystal of iodine at 140° until 1 mole was absorbed. Distillation gave 4.2 g. fraction, b0.6 134-52°, from which was obtained 2,3-dioxo-1,4-dioxane, m. 144-5.5°, infrared absorption (broad band) 1770 cm.⁻¹. During chlorination, 60 g. volatile material was passed through a H₂O-condenser and trap at 0° to give 1.4 g. liquid condensate; no solid derivative could be obtained with KOH and α-naphthol in EtOH from the liquid fraction (0.35 g.), b764 80-98°. I (67 g.) chlorinated as above, continued until 0.5 mole was absorbed, and the mixture held 5 hrs. at 80-95°/17 mm. gave 22.6 g. sublimate, m. 133-8° (CCl₄) and a liquid residue, which, on distillation, gave 11.3 g. distillate, b0.2 98-150° and 14.5 g. residue which did not distill at 245°/0.2 mm. Di-2-bromoethyl oxalate (IIa), m. 55.0-5.5° (C₆H₆-ligroine) was obtained from H₂C₂O₄ (64% yield) by the method of Contardi, et al. I (19.5 g.) and 25.2 g. N-bromosuccinimide (II) was heated in a sealed tube 22 hrs. at 120°, the product extracted with CCl₄, the CCl₄ distilled, and the residue (4.2 g.) held 4 hrs. at 85°/14 mm. ((0.22 g.) unchanged I sublimed) to give 0.5 g. unsublimed Ia, m. 55.0-5.5° (C₆H₆-ligroine), infrared absorption 4000-650 cm.⁻¹, strong at 1774 and 1745. 1,3-Dioxolane (III) (266 g.) containing 0.5 g. iodine was chlorinated at the b.p. (exothermic reaction) to constant weight (3 days), the product distilled at atmospheric pressure, and the main fraction distilled 3 more times to give 185 g. 2-chloroethyl formate (IIIa), b763 131-2°, n_D²⁵ 1.4251. Br (294 g.) was added dropwise to 136 g. III at 0° to give 425.5 g. product which, on repeated distillation in vacuo, gave 37 g. 2-bromoethyl formate (IV), b765 147-9°, b13 44.0-0.5, n_D²⁵ 1.4611; approx. the same yield of IV was obtained with all distns. except the 1st at atmospheric pressure. Evidence is given of thermal rearrangement of α-chloroacetals comparable with that for α-bromoacetals. Bromination of 23.5 g. III in 25 ml. CCl₄ with 50 g. II and distillation in vacuo gave 13.4 g. IV, b13 44.0-4.5, n_D²⁵ 1.4611; a fraction, b13 124-5°, after hydrolysis with H₂O at 80° and treatment with Brady's reagent, gave, as derivs. (separated with EtOH), the following 2,4-dinitrophenylhydrazones: glyoxal bis-, m. 333-6°

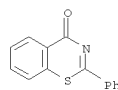
L4 ANSWER 42 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1960:56490 CAPLUS
DOCUMENT NUMBER: 54:56490
ORIGINAL REFERENCE NO.: 54:11033f-h
TITLE: A new heterocyclic system of the benzo[4,5]m-thiazine type. II
AUTHOR(S): Boudet, Roger
CORPORATE SOURCE: Fac. Scis., Dakar
SOURCE: Bulletin de la Societe Chimique de France (1959) 1791-3
CODEN: BSCFAS; ISSN: 0037-8968
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C.A. 49, 5376e. By condensation of PhCCl₃ with 2-mercaptobenzamide (I) in the presence of Zn in p-xylene, 2-phenylbenzo[4,5]m-thiazine-6-one (II) was obtained. II was chemical inert against the usual reagents, except H₂SO₄. This great stability is apparently due to considerable resonance stabilization. A suspension of 20 g. Zn derivative of II in 16.5 ml. PhCCl₃ and 200 ml. anhydrous p-xylene was slowly heated under vigorous stirring for 6-8 hrs. until the HCl evolution ceased. After chilling the solvent was distd and the residue dissolved in 100 ml. boiling PrOH. On cooling, 12 g. crude II was isolated and recrystd. from CHCl₃ or PrOH to yield 45% m. 108.3-9.0°. II (1 g.) in 20 ml. pure H₂SO₄ was heated slowly to 40°, until the evolution of SO₂ ceased, and, after 24 hrs. at room temperature, ice was added to yield 0.6 g. (o-H₂NCOC₆H₄S)₂, m. 249°, and 0.5 g. BrOH.
IT 7474-08-0P, 4H-1,3-Benzothiazin-4-one, 2-phenyl-
RL: PREP (Preparation) (preparation of)
RN 7474-08-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)



L4 ANSWER 41 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
(decompn.), and HCHO, m. 164-6° in approx. equal quantities. Di-2-chloroethyl oxalate (from 2.2 g. H₂C₂O₄) and 2.5 g. p-anisidine (V), heated at 100° and resolidified after 15 min., gave the di-p-aniside of H₂C₂O₄, m. 263.5-4.5° (C₂H₂Cl₄ and dioxane-H₂O). IIIa (10 g. from III) boiled in 30 ml. C₆H₆ with 11.3 g. V 1 hr. and the C₆H₆ removed gave 5.2 g. p-aniside of HCO₂H, m. 78° (EtOH). 2-Bromoethyl formate (30 g. from III) and 24.1 g. V, heated 1.5 hrs. on a steam bath, the cold mixt. triturated with 10 ml. MeOH and after 3 days, the crystals (11.2 g.) collected, gave needles, m. 287-9° (decompn.) (MeOH-dioxane); this (3.5 g.) treated with dil. aq. NaOH and Ac₂O gave aceto-p-aniside, m. 127° (H₂O). S-2-Hydroxyethylthiuronium picrate (VI), m. 234-42° (decompn.), prepd. in the usual way from BrCH₂CH₂OH in EtOH with previous melting at 162-4° and resolidification at 168°, was recovered quant. after boiling 8 hrs. in Me₂CO. IIIa (3.6 g. from III), 5.0 g. NaI, and 3.5 g. (H₂N)C₂S was boiled 8 hrs. in 15 ml. Me₂CO, 10 g. picric acid added to the cold mixt., then 15 ml. H₂O, the mixt. boiled to give a clear soln., evapd. to half vol., and an equal vol. H₂O added to give, on cooling, 3.2 g. VI, m. 236-46° (decompn.) (H₂O). Repetition of the expt. with 14.5 g. IIIa in Me₂CO as solvent at all stages gave 21.1 g. VI, m. 240-4° (decompn.) (Me₂CO-C₆H₆). Treatment of 3.6 g. IV with (H₂N)C₂S in EtOH gave 3.5 g. VI, m. 242-52° (decompn.) with previous melting and solidification at 163-6°.
IT 98592-33-7
(Derived from data in the 6th Collective Formula Index (1957-1961))
RN 98592-33-7 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 6-chloro-2-methyl- (CA INDEX NAME)

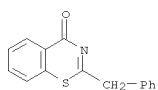


L4 ANSWER 43 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1957:99143 CAPLUS
DOCUMENT NUMBER: 51:99143
ORIGINAL REFERENCE NO.: 51:17927g-h
TITLE: 2-Aryl-4-oxo-5,6-benzo-1,3-thiazines
AUTHOR(S): Conti, L.; Leandri, G.
CORPORATE SOURCE: Univ. Bologna, Italy
SOURCE: Bollettino Scientifico della Facolta di Chimica Industriale di Bologna (1957), 15, 37-9
CODEN: BSFCAY; ISSN: 0366-3205
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB A new synthesis is described for the preparation of 2-aryl-4-oxo-5,6-benzo-1,3-thiazines, obtained by condensation of thioisocyclic acid with aromatic nitriles in presence of aqueous HCl. Numerous derivs. are described with regard to their possible therapeutic activity. Compds. prepared are (aryl given): Ph, needles, m. 125° (from EtOH); p-O₂NC₆H₄, yellow prisms, m. 230° (from EtOH-dioxane) [oxime, yellow prisms, m. 255° (from EtOH-dioxane)]; m-O₂NC₆H₄, yellow prisms, m. 212° (from EtOH-dioxane); m-MeC₆H₄, m. 136° (from EtOH); p-MeC₆H₄, m. 168° (from EtOH); m-ClC₆H₄, m. 178° (from EtOH); p-ClC₆H₄, prisms, m. 166° (from EtOH); p-O₂MeSC₆H₄, m. 234° (from dioxane); PhCH₂, yellow needles, m. 155° (from dioxane); 2-pyridyl, m. 177° (from EtOH); 3-pyridyl, m. 158° (from EtOH); 4-pyridyl, m. 172° (from EtOH).
IT 7474-08-0P, 4H-1,3-Benzothiazin-4-one, 2-phenyl-
67433-04-9P, 4H-1,3-Benzothiazin-4-one, 2-benzyl-
100961-67-9P, 4H-1,3-Benzothiazin-4-one, 2-[p-(methylsulfonyl)phenyl]- 106274-04-8P, 4H-1,3-Benzothiazin-4-one, 2-[p-nitrophenyl]- 106274-94-6P, 4H-1,3-Benzothiazin-4-one, 2-(m-nitrophenyl)- 106782-45-0P, 4H-1,3-Benzothiazin-4-one, 2-[p-chlorophenyl]- 106782-86-9P, 4H-1,3-Benzothiazin-4-one, 2-[m-chlorophenyl]- 107915-37-7P, 4H-1,3-Benzothiazin-4-one, 2-p-tolyl- 107917-93-1P, 4H-1,3-Benzothiazin-4-one, 2-m-tolyl-
RL: PREP (Preparation) (preparation of)
RN 7474-08-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)

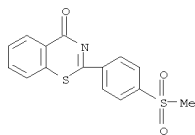


RN 67433-04-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(phenylmethyl)- (CA INDEX NAME)

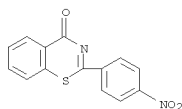
L4 ANSWER 43 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



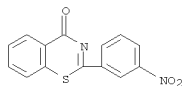
RN 100961-67-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-[p-(methylsulfonyl)phenyl]- (6CI) (CA INDEX NAME)



RN 106274-04-8 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(4-nitrophenyl)- (CA INDEX NAME)



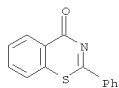
RN 106274-94-6 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(m-nitrophenyl)- (6CI) (CA INDEX NAME)



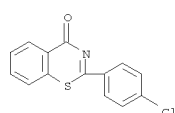
RN 106782-45-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(p-chlorophenyl)- (6CI) (CA INDEX NAME)

L4 ANSWER 44 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN

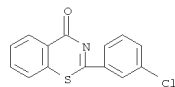
ACCESSION NUMBER: 1957:99142 CAPLUS
DOCUMENT NUMBER: 51:99142
ORIGINAL REFERENCE NO.: 51:17927e-g
TITLE: Preparation and structure of some chloro derivatives of the phenothiazine series. II. On the structure of dichlorophenothiazine and some derivatives
AUTHOR(S): Antonov, D. Simov
SOURCE: Doklady Bolgarskoi Akademii Nauk (1956), 9(No. 4), 57-60
CODEN: DBANAD; ISSN: 0366-8681
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C.A. 49, 5442c. 2,7-Diaminophenothiazine dioxide (I) (2.2 g.) dissolved in 60 ml. H₂O containing 3 ml. HCl, 60 ml. concentrated HCl (37%) added, and 7 ml. 10% solution NaNO₂ dropwise added, the solution heated to 50°, cuprous chloride catalyst (from 2.5 g. copper sulfate) added in one batch gave 1.06 g. 2,7-dichlorophenothiazine dioxide (II), m. 301-2°. II is identical with dichlorophenothiazine dioxide obtained from dichlorophenothiazine oxide. The position of the two chlorine atoms is thereby established.
IT 7474-08-0P, 4H-1,3-Benzothiazin-4-one, 2-phenyl-
RL: PREP (Preparation)
RN 7474-08-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)



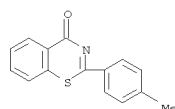
L4 ANSWER 43 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



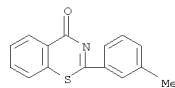
RN 106782-86-9 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(m-chlorophenyl)- (6CI) (CA INDEX NAME)



RN 107915-37-7 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(p-tolyl)- (6CI) (CA INDEX NAME)



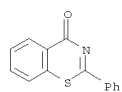
RN 107917-93-1 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-(m-tolyl)- (6CI) (CA INDEX NAME)



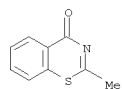
L4 ANSWER 45 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1955:84282 CAPLUS
DOCUMENT NUMBER: 49:84282
ORIGINAL REFERENCE NO.: 49:15907a-e
TITLE: Oxo compounds of the benzothiazine series
AUTHOR(S): Bohme, Horst; Schmidt, Wilhelm
CORPORATE SOURCE: Univ. Marburg/Lahn, Germany
SOURCE: Arch. Pharm. (1953), 286, 437-41
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 49:84282
AB cf. C.A. 49, 8289a. S-Acetylthiosalicylamide (I) was prepared in low yield by treating Na thiosalicylamide with AcCl in C₆H₆ (cf. Reissert and Manns, C.A. 22, 4114) and in good yield from thiosalicylamide (II) and AcCl in C₅H₅N; S-propionylthiosalicylamide (III) was prepared in analogous manner.
Sols. of S-acylthiosalicylamides saturated with HCl, on addition of xylene or toluene, distillation, and working up the residue yield the corresponding benzothiazine derivs. 4-Oxo-2-phenyl-5,6-benzo-1,3-thiazine (IV), yellowish crystals, m. 122-3° (from absolute EtOH or MeOH), was prepared in 59% yield by passing HCl for several min. through 2.0 g. S-benzoylthiosalicylamide in 20 ml. xylene at 140°, raising the temperature slowly, and distilling slowly (60-75 min.) while passing a little HCl through the solution, removing traces of solvent from the oily residue in vacuo, dissolving it in 20 ml. C₆H₆, removing unreacted amide with NaOH, washing with H₂O, drying over CaCl₂, and removing C₆H₆. IV.HCl is not stable. I, colorless prisms, m. 148° (from EtOAc), was prepared in 88% yield by adding 5.1 g. AcCl drop by drop to 10.0 g. II in 25 ml. anhydrous C₅H₅N while stirring, letting stand 30 min. at -15°, adding 80 ml. Et₂O, triturating with 50 ml. dilute H₂SO₄ at 0°, filtering, washing with H₂O, and drying. N,S-Diacetylthiosalicylamide, colorless needles, m. 74-5°, was prepared by refluxing I with excess Ac₂O 5-6 hrs. 4-Oxo-2-methyl-5,6-benzo-1,3-thiazine-HCl, m. about 140° (decomposition), was prepared in 74% yield from I like IV; free base m. about 190° (decomposition, sintering 180°) (from C₆H₆). III, colorless needles, m. 107-8°, was prepared like I in 96% yield. 4-Oxo-2-ethyl-5,6-benzo-1,3-thiazine-HCl, m.p. not given, was prepared in 41% yield like IV; free base, yellow powder, m. 50-60°.
IT 7474-08-0P, 4H-1,3-Benzothiazin-4-one, 2-phenyl-
854066-98-1P, 4H-1,3-Benzothiazin-4-one, 2-methyl-, hydrochloride
854067-00-8P, 4H-1,3-Benzothiazin-4-one, 2-methyl-
854067-02-0P, 4H-1,3-Benzothiazin-4-one, 2-ethyl-, hydrochloride
854067-04-2P, 4H-1,3-Benzothiazin-4-one, 2-ethyl-
RL: PREP (Preparation)
RN 7474-08-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-phenyl- (CA INDEX NAME)

L4 ANSWER 45 OF 45 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

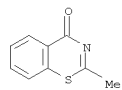


RN 854066-98-1 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-methyl-, hydrochloride (5CI) (CA INDEX NAME)

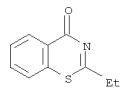


● HCl

RN 854067-00-8 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-methyl- (CA INDEX NAME)



RN 854067-02-0 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-ethyl-, hydrochloride (5CI) (CA INDEX NAME)



● HCl

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RN 854067-04-2 CAPLUS
CN 4H-1,3-Benzothiazin-4-one, 2-ethyl- (CA INDEX NAME)

